THE

American Journal of Education.

[NEW SERIES, NO. 2.]

No. XXVII.—JUNE, 1862.

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I. THE STATE AND EDUCATION.

What constitutional right has the government to impose the burthen of taxation on individual property, or to employ the public funds, however obtained, for the furtherance of any such object as that of popular instruction? Is not education a personal advantage, accruing to the individual instructed, as much as the possession of property, or any other good—and by what right does the government undertake to bestow personal benefits at all, much more to compel one class of men, because they are men of substance, to bear the expense of benefits gratuitously bestowed on another class?

In the first place, the power over education is one of the powers of *public police*, belonging essentially to government. It is one of those powers, the exercise of which, is indispensable to the preservation of society—to its integrity, and its healthy action. It rests on the same foundation as that which is employed in defining and taking cognizance of crime, in erecting courts, both of civil and of criminal jurisdiction, in establishing jails and penitentiaries, and in compelling the performance of contracts, and the reparation of injuries. In this point of view, it is one among a number of means to the same end, either of which, or all of which, may be freely used, according to the wisdom and discretion of the public authorities. All are lawful, and equally lawful and constitutional modes of action. In the present case, however, the choice is not a question of expediency or economy only—though certainly important in the latter point of view; but it becomes a question of humanity also. For while it will always be necessary to provide for the punishment of offences against society, when committed, and for the compulsory observance of personal obligations, and redress of personal grievances, yet it is vastly preferable, undoubtedly, that, if such a thing were possible, there should be no grievances to be redressed, no broken promises, and no committed crimes. It is the aim, and the undoubted tendency of education, properly understood and conducted, to accomplish this object—an object of incalulable benefit to human society. As a measure, designed to operate only as a law of police, the public support of education goes behind all crime, and all injurious and disturbing action in society, and seeks to occupy the intellect and the affections of men, and simply by informing the mind and molding the temper, by demonstrating that it is the interest and the happiness of each to be just and generous towards all, by letting a little light in on the understanding, and touching the heart, either to take from them the disposition to offend one

another, or to injure society, or to arm them with strength of purpose to resist every temptation to do so.

But there is another and broader ground, still, on which to rest the power and duty of the state, in regard to education. That which we have already noticed, is enough for the authority, if the state choose to exercise it, and in the opinion of your committee, enough for the duty also. But the consideration which we now approach, is not only sufficient for the abundant justification of authoritative action—it demands action, and the state could not justify itself to the people without it.

The people of this state, having united themselves together in a civil society, have agreed to secure to themselves, or to attempt to secure to themselves, the highest advantages of the social compact, through the agency of certain forms of government and administration. We have adopted the representative system; and we start from the position, that the whole political power of the country, much of it for immediate exercise, and all of it by ultimate reference, is in the hands of the people. And, on this grand position, as a basis, do all our constitutional forms absolutely rest. But just as children are unfit to govern themselves, so are uneducated men, being still children, though of huge growth, unfit to govern themselves. In one mode or another, associations of such men always have had, and always will have, protectors and masters; and we hardly need add, that a people with masters of any sort, as the basis of a free representative system, is a contradiction in terms. It is evident, therefore, that popular cultivation, as diffusive and general as the numbers composing the republic, is indispensable to the preservation of our republican forms—and hence arises the great constitutional duty of the government. *It is the duty of self-preservation, according to its actual mode of existence, for the sake of the common good.* The highest good of the whole, as a body, is the object in view; that good is to be attained only, according to the very terms of the original compact, through our adopted forms; and the duty of preserving and maintaining those forms, in their vigor and purity, becomes, at once, the very highest duty and obligation of those who are intrusted with the administration. It is a duty, every instant, and perpetually, in force. No change of administration can affect it; and the moment it is denied or neglected, that moment is the cause of the republic repudiated and betrayed.

It is easy, we think, to know when this duty of maintaining our constitutional forms, by the care which is taken of the structure on which they rest, is in the way of being faithfully performed. The duty is *not* well provided for, unless some rational plan of public instruction shall have been devised and adopted, the object and the probable effect of which shall be, to lead to the cultivation of every child in the community, at least so far as to fit them all, without exception to the extent of their capabilities, for an intelligent discharge of the common and ordinary duties and responsibilities of social and political life, to which all, or nearly all, are called by the very conditions of our social and political forms. The future mother must be educated in every female child—a

matter not to be neglected if we would have men in the republic; and in every male child, must be educated the future elector, juror, and local administrator.

The duty of being educated is, undoubtedly, one of positive obligation, resting on every citizen, as part of the original compact between every citizen and the whole body of citizens; and as far as instruction is attainable in youth, the obligation rests on parents and guardians. It is a duty which by no means concerns the individual only; it is one in which every other individual, and the whole community have a deep interest. The verdict of jurors, and the decision of a contested election, perhaps by the casting vote of a single person, are matters of vast concernment to others, besides those who render the verdict, or turn the election.

But while there can be no doubt about this personal duty, and the claims which the community has on every member in regard to it, it is clearly one which could not, especially with us, be enforced by any direct and arbitrary exercise of power. Happily, we think, nothing of this sort is necessary, any more than it would be desirable.

There are evidently two difficulties in the case to contend with. One of them is, that so long as men differ in endowment and in the allotments of Providence, and so long as the rights of property shall be respected, there will always be a considerable portion of the community unable, for want of the necessary means, to sustain the expenses of education. Whenever this is the case, we hold it to be the duty of the state to supply the necessary means; and on this principle the state has long acted.

The other difficulty in the case is the more serious one of the two. It is, that perhaps a large majority of those who have the means of meeting the necessary outlays for the proper education of their children, are not disposed to use them for any such purpose. The burthen in many cases is undoubtedly a heavy one, and it is difficult to convince parents of the unquestionable truth, that they can make no provision for their offspring by pecuniary aids, which can in any degree compensate for the want of adequate mental and moral cultivation.

This is a difficulty to be met by the state, with measures of a delicate character -measures calculated to induce and to persuade—measures aiming to bring in public opinion to its aid, and appealing at once to the good sense, the pride, and the interest of the parties concerned. Whatever compulsory action is resorted to, must be of a gentle and paternal character, and be surrounded and accompanied with every circumstance of kindness, and with whatever is best adapted to move and to interest. Such, in a great measure, has been and is the nature of the system of public instruction long in operation in this state, so far as designed to meet the difficulty here suggested; and your committee propose some important measures, regarded by them as worthy of great consideration, not certainly to change materially the features of the system in this respect, but to modify them, and if possible to give them efficiency.

There is one other test to which your committee would refer, as one by which we may know whether the state has performed, or is performing,

its great constitutional duty of self-preservation for the common good, by taking due care of the subject of popular instruction. That test is, whether or not the system be such as makes education a thing of practicable and probable attainment by the class of the comparatively indigent. For if it be otherwise, there can be no security for the continuance of our constitutional forms. In this age of the world, the rich in any civilized community will be educated; and if the poor can not be, and are not, the necessary consequence is, that a separation takes place. Knowledge is power, and it will be exercised; and a selfish aristocracy, formed of those who are at the same time rich and educated, will bear the class of the indigent and ignorant to the wall. The community being once divided into these two great classes, it matters little, to the present argument at least, whether the powerful bear sway wisely and well, or oppressively: in either case the balance is destroyed which makes our government what it is; our constitutional forms are not preserved; and so much of common good as depended upon them, much or little, is sacrificed.

Nor is it enough, in our judgment, to satisfy the demands of the test now referred to, that our common schools are made accessible to all classes, the poorest as well as the better conditioned. If the system stopped here, it would aid in creating the very distinction and separation which ought to be avoided. In the first place the condition of the common schools themselves must be elevated; and if it is not, the consequence will soon be, that they will come to be regarded as the seminaries of the poor, when the rich will desert them; yielding them neither countenance nor support any further than forced to do so, or contributing to sustain them, like other institutions for the poor, as public charities. The condition of these schools then must be elevated. They must be common places of resort for all classes as far as possible, where the youth of the same neighborhood, however otherwise separated, may meet, as youth now meet in our academies and colleges, to sacrifice all distinctions except such as grow out of various success in the prosecution of the same studies.

But this is not all; the way to the higher schools—to the academies and colleges—must be open, at least to the young man of genius and enterprise among the classes of the indigent, as well as to his more wealthy rival.

There is one way, and only one in which this can be done; and that is, by such liberal endowment of the better schools, by private munificence and state patronage, as will bring down the wages of instruction to the person taught, to a moderate sum. When this is accomplished, the balance between the wealthy and poorer classes will be easily struck; for though their relative numbers will still be unequal in these schools, the sum of knowledge and intellectual power among the sturdy and ambitious sons of poverty, will be, out and out, equal to that acquired and displayed by the more numerous class of those among whom must always be many whom indulgence and luxury have enervated.

D. D. Barnard. *Report as Chairman of Leg. Committee*, 1838.

In this particular, New England may be allowed to claim, I think, a merit of a peculiar character. She early adopted and has constantly maintained the principle, that it is the undoubted right, and the bounden duty of government, to provide for the instruction of all youth. That which is elsewhere left to chance, or to charity, we secure by law. For the purpose of public instruction, we hold every man subject to taxation in proportion to his property, and we look not to the question, whether he himself have, or have not, children to be benefited by the education for which he pays. We regard it as a wise and liberal system of police, by which property, and life, and the peace of society are secured. We seek to prevent, in some measure, the extension of the penal code, by inspiring a salutary and conservative principle of virtue and of knowledge in an early age. We hope to excite a feeling of respectability, and a sense of character, by enlarging the capacity, and increasing the sphere of intellectual enjoyment. By general instruction, we seek, as far as possible, to purify the whole moral atmosphere; to keep good sentiments uppermost, and to turn the strong current of feeling and opinion, as well as the censures of the law, and the denunciations of religion, against immorality and crime. We hope for a security, beyond the law, and above the law, in the prevalence of enlightened and well-principled moral sentiment. We hope to continue and prolong the time, when, in the villages and farm-houses of New England, there may be undisturbed sleep within unbarred doors. And knowing that our government rests directly on the public will, that we may preserve it, we endeavor to give a safe and proper direction to that public will. We do not, indeed, expect all men to be philosophers or statesmen; but we confidently trust, and our expectation of the duration of our system of government rests on that trust, that by the diffusion of general knowledge and good and virtuous sentiments, the political fabric may be secure, as well against open violence and overthrow, as against the slow but sure undermining of licentiousness.

DANIEL WEBSTER. *Discourse at Plymouth*, 1822.

COLONY OF MASSACHUSETTS.

It being one chief project of the old deluder, Satan, to keep men from the knowledge of the Scriptures, as in former times by keeping them in an unknown tongue, so in these latter times by persuading from the use of tongues, that so at least the true sense and meaning of the original might be clouded by false glosses of saint-seeming deceivers; that learning may not be buried in the grave of our fathers in the church and commonwealth, the Lord assisting our endeavors—

It is therefore *ordered*, that every township in this jurisdiction, after the Lord hath increased them to the number of fifty householders, shall then forthwith appoint one within their town to teach all such children as shall resort to him, to write and read; whose wages shall be paid, either by the parents or masters of such children, or by the inhabitants in general, by way of supply, as the major part of those that order the prudentials of the town shall appoint; provided, those that send their children be not oppressed by paying much more than they can have them taught for in other towns; and it is further *ordered*, that when any town shall increase to the number of one hundred families or householders, they shall set up a Grammar School, the master thereof being able to instruct youth so far as they may be fitted for the University; provided, that if any town neglect the performance hereof above one year, that every such town shall pay £5 to the next school till they shall perform this order.

Order of General Court, 1647.

COLONY OF CONNECTICUT.

Forasmuch as the good education of children is of singular behoof and benefit to any commonwealth; and whereas many parents and masters are too indulgent and negligent of their duty in that kind—

It is therefore ordered by this court and the authority thereof, That the selectmen of every town in the several precincts and quarters where they dwell, shall have a vigilant eye over their brethren and neighbors, to see, first, that none of them shall suffer so much barbarism in any of their families, as not to endeavor to teach by themselves or others, their children and apprentices so much learning, as may enable them perfectly to read the English tongue, and knowledge of the capital laws, upon penalty of twenty shillings for each neglect therein; also, that all masters of families, do, once a week at least, catechise their children and servants, in the grounds and principles of religion, and if any be unable to do so much, that then, at the least, they procure such children or apprentices to learn some short orthodox catechism, without book, that they may be able to answer to the questions that shall be propounded to them out of such catechisms by their parents or masters, or any of the selectmen, when they shall call them to a trial of what they have learned in this kind; and further, that all parents and masters do breed and bring up their children and apprentices in some honest lawful calling, labor or employment, either in husbandry or some other trade profitable for themselves and the commonwealth, if they will not nor can not train them up in learning, to fit them for higher employments; and if any of the selectmen, after admonition by them given to such masters of families, shall find them still negligent of their duty, in the particulars aforementioned, whereby children and servants become rude, stubborn and unruly, the said selectmen, with the help of two magistrates, shall take such children or apprentices from them, and place them with some masters—boys till they come to twenty-one, and girls to eighteen years of age complete—which will more strictly look unto and force them to submit unto government, according to the rules of this order, if by fair means and former instructions they will not be drawn unto it. *Code of* 1650.

COLONY OF NEW HAVEN.

Whereas, too many parents and masters, either through an over tender respect to their own occasions and business, or not duly considering the good of their children and apprentices, have too much neglected duty in their education while they are young and capable of learning—It is ordered that the deputies for the particular court in each plantation within this jurisdiction for the time being; or where there are no such deputies, the constable, or other officer or officers in public trust, shall from time to time, have a vigilant eye over their brethren and neighbors within the limits of the said plantation, that all parents and masters, do duly endeavor, either by their own ability and labor, or by improving such schoolmaster, or other helps and means as the plantation doth afford, or the family may conveniently provide, that all their children and apprentices, as they grow capable, may through God's blessing attain at least so much as to be able duly to read the Scriptures and other good and profitable printed books in the English tongue, being their native language, and in some competent measure to understand the main grounds and principles of Christian religion necessary to salvation. And to give a due answer to such plain and ordinary questions as may by the said deputies, officer or officers be propounded concerning the same. And when such deputies, or officers, whether by information or examination shall find any parent or master one or more negligent, he or they shall first give warning, and if thereupon due reformation follow, if the said parents or masters shall thenceforth seriously and constantly apply themselves to their duty in manner before expressed, the former neglect may be passed by; but if not, then the said deputies and other officer or officers, shall three months after such warning, present each such negligent person or persons to the next plantation court, where every such delinquent, upon proof, shall be fined ten shillings to the plantation, to be levied as other fines. And if in any plantation there be no such court kept for the present, in such case the constable, or other officer or officers warning such person or persons, before the freemen or so many of them as upon notice shall meet together and proving the neglect after warning, shall have power to levy the fine as aforesaid. But if in three months after that, there be no due care taken and continued for the education of such children or apprentices as aforesaid, the delinquent (without any further private warning,) shall be proceeded against as before, but the fine doubled. And lastly, if after the said warning and fines paid or levied, the said deputies, officer or officers, shall still find a continuance of the former negligence, if it be not obstinacy, so that such children or servants may be in danger to grow barbarous, rude, and stubborn, through ignorance, they shall give due and seasonable notice that every such parent and master be summoned to the next court of magistrates, who are to proceed as they find

cause, either to a greater fine, taking security for due conformity to the scope and intent of this law, or may take such children or apprentices from such parents or masters, and place them for years, boys till they come to the age of one and twenty, and girls till they come to the age of eighteen years, with such others who shall better educate and govern them, both for the public conveniency and for the particular good of the said children or apprentices.

Colony Law. 1655.

COLONY OF PLYMOUTH.

Forasmuch as the maintenance of good literature doth much tend to the advancement of the weal and flourishing state of societies and republics, this court doth therefore order, that in whatever township in this government, consisting of fifty families or upwards, any meet man shall be obtained to teach a grammar school, such township shall allow at least twelve pounds, to be raised by rate on all the inhabitants. *Order of Legislature.* 1669.

In the early history of almost every town in every state of New England, a portion of the public land was reserved, or special grants were made by individuals for "gospel" and school purposes.

On the 17th of May, 1784, Mr. Jefferson, as chairman of a committee for that purpose, introduced into the old Congress an ordinance respecting the disposition of the public lands, but this contained no reference to schools or education. On the 4th of March, 1785, another ordinance was introduced—by whom does not appear on the Journal, and on the 16th of the same month was recommitted to a committee consisting of Pierce Long, of New Hampshire, Rufus King, of Massachusetts, David Howell, of Rhode Island, Wm. S. Johnson, of Connecticut, R. R. Livingston, of New York, Charles Stewart, of New Jersey, Joseph Gardner, of Pennsylvania, John Henry, of Maryland, William Grayson, of Virginia, Hugh Williamson, of North Carolina, John Bull, of South Carolina, and William Houston, of Georgia. On the 14th of April following, this committee reported the ordinance—by whom reported, no clue is given; which after being perfected, was passed the 20th of May following, and became the foundation of the existing land system of the United States.

By one of its provisions, the 16th section of every township was reserved "*for the maintenance of public schools;*" or, in other words, one section out of every thirty-six composing each township. This same provision was incorporated in the large land sale, in 1786, to the Ohio Company; and, the following year, in Judge Symmes' purchase. The celebrated ordinance of 1787, for the government of the Territory Northwest of the river Ohio, and which confirmed the provisions of the land ordinance of 1785, further declared, that, "RELIGION, MORALITY and KNOWLEDGE, being necessary to good government, and the happiness of mankind, SCHOOLS, AND THE MEANS OF EDUCATION, SHALL BE FOREVER ENCOURAGED." From that day to the present, this noble policy has been confirmed and extended, till its blessings now reach even the distant shores of the Pacific, and FIFTY MILLIONS OF ACRES of the public domain have been set apart and consecrated to the high and ennobling purposes of education; together with five per cent. of the net proceeds of the sales of all public lands in each of the States and Territories in which they are situated.

LYMAN DRAPER. *Report of Supt. of Public Instruction*, 1858.

II. CONVERSATIONS ON OBJECTS.

A PRACTICAL COURSE OF ELEMENTARY INSTRUCTION IN LANGUAGE AND FOR MENTAL DEVELOPMENT.

(Continued from Volume XI., page 82.)

In the former article the subject was discussed under the following heads:—

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That our readers may have before them the leading points of the whole subject as treated by Mr. Marcel, we give the headings of the following article:—

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SECT. IV.—MODE OF IMPARTING SCIENTIFIC INFORMATION TO CHILDREN.

The younger the children are, the less methodical ought to be the course of instruction. They must not, at first, dwell long on particulars, or investigate any subject profoundly. It is enough that their judgments be exercised incidentally and in a playful manner. For-

mality and gravity must be avoided, not to create dislike. The conversations should be enlivened by cheerfulness, and the subject illustrated by familiar and amusing experiments. Such illustrations will foster a taste for scientific pursuits more effectually than dry dissertations.

The teacher must take care not to measure his pupil's capacity by his own; he should not cram them with truths beyond the feeble grasp of their intellect, nor force on them abstract principles of science. He should chiefly dwell on facts, and especially on those which can be ascertained by the perceptive faculties. The simplest and most obvious qualities should, alone, in the first instance, be presented to their notice; and, by a succession of observations and experiments, as they become capable of deeper investigation, they may be led to discover the most hidden properties, even those which are cognizable only by chemical analysis. To accomplish this object, the practical instruction unfolded in this chapter should be carried on beyond the age of twelve and conjointly with classical education. It will, in the third period of youth, assume the form of regular scientific courses and discussions on the higher departments of knowledge. The instructor may then occasionally deliver short and interesting lectures, with a view to investigate more fully some of the subjects touched upon in the conversations. The sort of information which bears more immediately on the future position of the learner may thus be pursued in connection with a proper course of reading.

As the pupils advance in mental power, the instructor should make occasional excursions on philosophical and scientific ground, in order to excite in them a taste for such studies as they are afterwards seriously to pursue. Yet, it must not be forgotten that little more than elementary instruction can be imparted to children under twelve years of age; and nothing more is wanted until the third period. All those who have made some advance in knowledge will readily admit that, in every branch, elementary principles alone are required to be taught: beyond this, reading, study, and observation may, without the assistance of teachers, carry a learner to the highest departments of science.

But although a child is not to be made a scholar or a philosopher before his time, he should be encouraged to investigate subjects for himself and to draw his own conclusions; he should be accustomed to direct his attention to serious matters, and his mind should be gradually prepared for abstract reasoning. If he begins by learning philosophy in sport, he must not, as Walter Scott aptly expresses it, make sport of philosophy. He should be early made conscious that,

to follow the paths of knowledge with advantage, persevering and laborious effort must be made; for, in general, nothing worth learning is attainable without trouble. To minds properly trained, the overcoming of difficulties, consequent on earnest application, is a pleasure at any period of life. Observation and reflection, concentrated for a long time on one study, produce more beneficial effects than the capricious and versatile impulses of genius. Newton, James Watt, Buffon, Cuvier, and all those who have accomplished important objects in science or art, owed their success chiefly to patient investigation, undeviatingly directed to one great end.

Many persons, who, in their youth, have not gone through this mental discipline, shrink in the maturity of age from entering upon the study of any branch of information which it might be desirable for them to possess. Others, who have been more accustomed to depend for information on their books and masters than on themselves, are often incapable of advancing one step beyond what they have been taught. "I am persuaded," says Descartes, "that, if I had been taught in my youth all the truths, the demonstrations of which I have since sought, and if I had not had some trouble in learning them, I should perhaps never have acquired the habit and facility which, I think, I have, in finding new ones, in proportion as I apply myself to the discovery." No branch of knowledge, however difficult to be attained, is beyond the reach of those who feel conscious of their own capability and independence. It is the business of early education to beget this consciousness.

SECT. V.—ON INCULCATING NOTIONS OF TASTE, ORDER, AND PIETY.

The minds of the young require to be refined as well as informed; the instructor ought then to cultivate their taste, by frequently turning their attention to the many circumstances which concur in producing the beautiful, either in nature or in art. With this view, fitness and utility of things, symmetry and variety of forms, proportion and relation of parts, contrast and blending of colors, grace and regularity of motion, grandeur and unity of design, must be successively examined in objects which excite pleasure or admiration. The latter feeling is a powerful means of education; and, to produce it in children, every opportunity should be seized to give them a consciousness of all that is grand and beautiful. The verdant field, the shady grove, the towering mountain, the variegated landscape, the boundless ocean, the starry firmament, the rising and setting sun, and all other enchanting and sublime scenes of nature should be frequently offered to their contemplation; early associations evolved from such perceptions and from the trains of ideas to which they

lead, will be the source of intellectual pleasures in maturity, and the foundation of good taste in the fine arts. Painting, statuary, poetry, and all descriptive or imaginative compositions, owe their choicest beauties to the study and contemplation of nature.

"While a taste for the beauty and sublimity of nature opens to the years of youth a source of pure and of permanent enjoyment, it has consequences on the character and happiness of future life, which they are unable to foresee. It is to identify them with the happiness of that nature to which they belong; to give them an interest in every species of being which surrounds them, and, amid the hours of curiosity and delight, to awaken those latent feelings of benevolence and sympathy, from which all the moral and intellectual greatness of man finally arises. It is to lay the foundation of an early and of a manly piety, and to make them look upon the universe which they inhabit, not as the abode only of human cares or human joys, but as the temple of the Living God, in which praise is due, and where service is to be performed."—*Alison on Taste.*

Although the works of art yield in magnificence and perfection to those of nature, they must not be overlooked. Engravings, paintings, statues, monuments, ruins, every thing which speaks to the eye and imagination, should be brought before the notice of young persons, as eminently conducive to the cultivation of taste. Thus will they gradually acquire the power of enjoying and admiring the masterpieces of art, as well as the wonders of creation; hence, also, will they become capable of appreciating the merits of the splendid and vivid descriptions which characterize the works of great writers, ancient and modern, who have been the most faithful interpreters of nature.

Habits of order will especially be conducive to the cultivation of taste; for order is essential to beauty. Children should be accustomed to do every thing at the proper time, to put every thing in its proper place, to observe regularity in all they do, and to notice it wherever it exists. They should be made to perceive the analogies between things, the links in the succession of events, and the periodical return of natural phenomena. Order has a most powerful and beneficial influence on all the operations of the human mind; it fixes attention, assists memory, regulates imagination, and rectifies judgment; it is the torch of reason.

By an easy transition, children may be shown how wisely the Author of all things has ordered the most minute details of the creation; how beneficially he has adapted the nature and habits of man, the conformation and instincts of animals, to the climate and

productions of the country in which they are intended to live. Thus the perfect order which reigns throughout the universe, and the wonderful adaptation of every thing to the use for which it is intended by the Almighty, will become constant objects of their contemplation. Every evidence of wise and beneficent design will render the facts more interesting, will exercise reason and excite admiration. There is no created thing, no operation in nature, which is not calculated to raise our souls toward heaven, and to teach a lesson of piety and virtue. A child should be constantly led "to look through nature up to nature's God;" and as he investigates more minutely the properties and uses of things, he will gradually be penetrated with a full conviction of the order, harmony, and beauty of the universe; and his heart will be filled with gratitude, love, and veneration for its Author. Every opportunity should be seized to impress sentiments of this nature on his mind: when they have become habitual they will furnish the best security for future good conduct.

This will present no difficulty; for every thing proclaims the existence of God; "it is written in flaming letters on the canopy of the heavens, and in brilliant colors on the wings of the butterfly." With any object before their eyes, children may be induced to observe and reflect on the superiority of the productions of nature over those of art; their attention will easily turn from the human manufacturer to the divine Creator; they will see the imperfection which marks every work of man, to whom all the materials are furnished, in comparison with the inimitable perfection which shines in all that God has made, and will be struck by the narrow selfishness of art, compared with the universal benevolence which breathes throughout nature. Thus deeply impressed with a sense of the power, wisdom, and goodness of the Creator, their hearts will early open to sentiments of pious admiration of His works. With a little tact an instructor may, from the least incident, from the most trifling object, illustrate some of the laws of nature, and draw from them moral and religious truths. The better to accomplish this important part of his duty, he ought to make nature his particular study, and to enrich his mind with the thoughts of the standard writers on natural theology.

SECT. VI.—EDUCATIONAL APPARATUS—SPECIMENS, MODELS, ENGRAVINGS, AND PAINTINGS.

In imparting the elements of knowledge to which we have adverted, the instructor should take care that the technical terms which he occasionally introduces convey to the minds of his pupils clear ideas of the things which they represent. For this purpose he must, conformably to a principle already laid down, submit those things to

their perceptive powers before he makes them acquainted with the words by which they are expressed. This will be the more methodically and the more completely effected, if the instructor be provided with various collections of objects, which may always be brought in illustration of the facts mentioned. He should, above all, have specimens of mineral, vegetable, and animal substances, classified and arranged in series indicating their genus and species, as also collections of manufactured articles, exhibiting the various modifications effected by art on natural productions. Children should be encouraged to make such collections; they would thereby acquire much valuable information, with habits of order, classification, and useful inquiry.

In addition to these objects and to those mentioned in preceding sections, the educational apparatus should contain instruments of natural philosophy, which come in aid of the physical faculties, and would enable the learners to witness or perform a great number of interesting and instructive experiments.

As the opportunity can not always be afforded to children of examining the objects, or witnessing the facts, which may incidentally become the subjects of conversation, the deficiency may, in great part, be supplied by models, pictures, engravings, or colored prints, which will complete the educational apparatus. If the class be numerous, the instructor should have near him a blackboard, on which to sketch or write such things as demand visible illustrations. Descriptions of things and definitions of terms should be introduced only as a last resource; for the ideas acquired without the direct intervention of the external senses are much less vivid and less precise than those which are received through their operation. There are many things in nature, in the sciences, and in the arts, which it would be difficult to describe, and of which the representation would give a perfect idea.

Pictorial illustrations may be used most efficiently as substitutes for objects. They are intelligible at a very early period in life, long before books can be understood; particularly when children have been, as already recommended, exercised in sketching familiar objects from nature—a favorite occupation with them.

But whatever visible representations are placed before a child, they should be faithful delineations of the things themselves, otherwise his imagination would be misled, and his judgment perverted, by the false notions he would form of those things, if they could not be submitted to his perceptive powers. Caricatures, especially such as may create prejudice against any class of people, and all books which display bad feelings against other nations, should be sedu-

lously kept from his sight. Educational works, of all others, should be free from unchristian sentiments against our fellow-creatures. Those who write for youth will have much to answer for, if, by misstatement or exaggeration, they nurture in the mind of the rising generation anti-national feelings of rancor and enmity.

The forms and comparative sizes of the objects represented should be correct, and rendered clear to children by appropriate explanations. They should be made to notice the relative proportions of the different parts of the picture, as well as the effects produced by perspective and by light and shade. In this manner not only will their eyes be made more accurate and their taste be cultivated, but they will be prepared for a clear comprehension of the diagrams and sketches which are indispensable accompaniments to treatises on the arts and sciences.

Pictures and engravings are a never-failing source of pleasure; and not only will they materially contribute to enliven instruction and beguile the hours, but they will indefinitely extend the horizon of young people's observation. They will bring within their mental grasp whatever in nature or in art is worthy of consideration—plants and animals of every climate, costumes and manners of different nations and of different epochs, implements of art and weapons of war, remarkable monuments and places, eminent men of ancient and modern times; in short, innumerable things of which the realities are, at the time, inaccessible to them. When they afterwards see objects, the representations of which are familiar to them, they will observe them with much more attention and eagerness than they would otherwise have done. Visits to cabinets of natural history, museums of curiosities, repositories of arts, and galleries of paintings, would thus be rendered exceedingly interesting and profitable.

In this respect, France is a pattern to other nations; she offers to her youth advantages not to be procured any where else. Her capital teems, through all its public squares and gardens, with specimens of the fine arts, which by early familiarizing the people with beautiful models of statuary and architecture, cultivate their taste and elevate their minds. Her rich and numerous collections are open to all those who seek for knowledge, or intellectual gratification. But, of all her public institutions, the most remarkable, perhaps, is the Musée de Versailles. At the same time that the taste of the beholder is cultivated by the beautiful specimens of the French school which it contains, the national history is learned in the most interesting and impressive manner. These eloquent annals of the glorious deeds of France, speaking to the eye and imagination of our youth, must

kindle in their hearts a noble pride and an ardent desire to serve their country and to imitate their ancestors. This national museum is indeed worthy of a great nation. To complete the benefits expected from it nothing is now wanted but to attach to it eminent historiographers and professors of French history. Their lessons, in the presence of these animating illustrations, would possess a new interest, and would impress the facts most vividly on the minds of their auditory.

Louis Philippe, was aware of the importance of this historical monument with respect to instruction; and, being as anxious to promote the national education of the people as to immortalize "all the glories of France," he gave, on opening it, a noble example to parents and instructors. He himself, conducted through its vast and splendid galleries, the pupils of the colleges of Paris, to whom he addressed these memorable words, "My children, in forming this museum, I wished to prove that France has accomplished things as great as those republics of Rome, Athens, and Sparta, with which your attention is too much occupied."

SECT. VII.—TECHNICAL, SCIENTIFIC, AND ABSTRACT TERMS.

In presenting to the consideration of children objects or facts, experiments or engravings, every thing should be called by its technical name: thus will they be early accustomed to the language of science, and the better prepared to enter afterwards upon serious studies, and derive benefit from public lectures. Scientific terms initiate us, in fact, into the sciences of which they constitute the nomenclature. Being more precise in their signification than common terms, they leave on the mind ideas more definite; they are employed in a sense rigorously limited and always identically the same, whereas common terms, having grown up in the mind from a thousand diverse suggestions, present much vagueness and obscurity in their application. Scientific words will be as easily retained as any others, if they be frequently used as the signs of the ideas which they represent. The specific words, *curve*, *circular*, and *spherical*, for example, which qualify, the first, a line, the second, a surface, and the third, a solid, are more definite, and, in many instances, more correct than the vague familiar generic word round, which applies indifferently to lines, surfaces, and solids. Those who converse with children can greatly facilitate to them the acquisition of scientific, as of all technical expressions. But, at the same time, they should keep in mind that it is often desirable to express the results of science without the ostentation of its terms.

Scientific words should, when first introduced, be accompanied by some development or periphrasis in simple language, to explain and fix them on the memory by the force of association. The familiar illustration of a technical expression will not only make it more intelligible but the advantage of knowing it will be rendered sensible to children, as they will perceive that it expresses very briefly and precisely what, in familiar words, would demand much circumlocution. However, the frequent application of the same technical term in different circumstances will render it quite clear and familiar: they need not, at first, be required to define the technical word; it is enough to furnish them with frequent opportunities of using it appropriately.

The art of defining presents great difficulty from the conciseness and precision required; and, as it proposes to characterize things by their essential properties, it often involves considerations entering deeply into the nature of the things denoted by the words to be defined. Definitions are to words what descriptions are to things; the former is an exercise in reflection, as the latter is in observation; in the order of studies, exercises in observation should precede those in reflection. At a more advanced age, defining words and paraphrazing sentences will improve the power of speech of young persons, by enabling them to ascertain the precise meaning of words, and the different ways of expressing the same idea.

The preceptor should employ every means in his power to guard his pupils against using obscure terms, or words without definite ideas attached to them. To this effect, objects and facts must not be brought under their notice in very rapid succession. The introduction of a new expression should be preceded by the perception of the thing signified, or the illustration of the fact which it serves to designate. They should, as it were, be made to feel a want of it. The expression will then serve as it ought, both to retain the impression and to recall it as occasion requires. By this means, also, their knowledge of words will keep pace with their ideas. Some people have more words than ideas; others, more ideas than words. Of these two evils the second is the smaller; for we only find it an inconvenience not to be able adequately to express all our thoughts; but we render ourselves ridiculous by misapplying words for want of knowing their corresponding ideas.

In order that young persons may acquire habits of perspicuity and accuracy in the use of words, the instructor must avoid using terms of vague import; and when he employs such as have different significations, which may often happen with abstract and metaphysical expressions, he must take care that they are understood by his pu-

pils in the sense which he attaches to them. If, for example, the word *abstraction* be introduced, he must make it clear to them whether he uses this word for the so-called faculty of the mind, the action of that faculty, or the result of that action; for it admits of these three acceptations. Equivocal expressions lead to confusion of thought and false reasoning: sophistry consists, for the most part, in using a word in one sense in the premiss, and in another sense in the conclusion. But it is not, at first, by definitions that such expressions can be explained; pure abstractions are unintelligible to young children. The meaning of an abstract term should arise from the context and from the incidents of conversation. Any one property common to several objects will, by the consideration of the abstract idea thus presented, easily lead to the comprehension of abstract words. As most metaphorical terms are derived from words expressive of sensible things, young people may occasionally be shown the analogy which exists between abstract or metaphysical ideas and those which may be called sensible.

When a child knows how to read, his attention must be sometimes directed to the written expressions, and not only should the errors he commits respecting the propriety of terms, or perspicuity of language, be corrected, but the principles of grammar which are violated should be stated. If, at the time he hears new words, their nature, origin, and composition be explained, and if, by proper illustration, their functions and different acceptations be shown as well as their places in sentences, he will not only know and recollect them better, he will also be initiated into the first principles of grammar and composition. We will, in the following chapter, advert to the mode of imparting elementary notions of grammar.

SECT. VIII.—RECAPITULATIONS, DESCRIPTIONS, NARRATIONS, COMPOSITIONS, AND LETTER-WRITING.

The necessities of our communicative dispositions and the present state of society, demand that the conceptive, imaginative, and recollective powers be early trained to the oral and written expression of thought. Children, should, therefore, frequently avail themselves of their newly acquired words and ideas, to incorporate them into extempore discourse: when the mind is full of a subject, the tongue will readily give expression to it. They ought to be made, at the end of each lesson, to recapitulate what has just been said; or, the object being removed from their sight, they may be desired to describe it minutely. This will stimulate their attention during the lesson, and will impress better on their minds the facts and expressions which have been elicited by a minute examination of an object;

we are not sure of understanding a thing until we can clearly convey our conception of it to another person. But, to render this practice truly effective in improving the understanding and language of children, the instructor should always insist on precision of expression and accuracy of description; for the act of accurately recalling the ideas which things suggest cultivates conception, reflection, and recollection, as the act of minutely observing these things cultivates attention, perception, and retention. At a more advanced period, these recapitulations may be made by the learners the day after the conversation. They will, at all times, enable the instructor to ascertain how much his pupils have retained of the knowledge communicated to them, and whether they understand it perfectly.

If the conversations are continued after children know how to write, they may be made the objects of essays. These should begin with the description of simple objects, stating their parts, colors, forms, substances, and dimensions, then their properties, qualities, uses, origin, mode of fabrication, &c., following, in short, the gradation which has been indicated in the foregoing course of conversational instruction; the narration of simple facts and daily occurrences would be the next step; and, at a later period, rural excursions and visits to manufactories would afford abundant materials for exercising their narrative and descriptive powers. The narrating of short and interesting anecdotes which they have read or heard, and brief accounts of historical events, would also forward this object; it would present the double advantage of a dictation and a composition; would turn their attention to ideas as well as to words; would exercise their memory and imagination. From such narrations and descriptions they would, by degrees, venture upon observations and reflections of their own which would give to their compositions all the character of original essays.

The great obstacle which young people encounter in the writing of essays is the want of ideas. "*I do not know what to say,*" is their invariable answer, when desired to write a composition, or a letter to some relative. This cause of complaint would be effectually removed by conversations on objects; for, in these, their observant and recollective powers are aroused by questions and suggestions; they are impressed with clear notions which form in their minds connected subjects on which they have, as it were, only to report. If they have heard and expressed just ideas on any one topic, they will find little difficulty in writing their conversation. The reading and criticising of these compositions will, afterwards, afford to the instructor the means of correcting misconceptions, as well as errors of language.

These oral and written summaries, by habituating young persons to analyze, arrange, and express their ideas, will teach them to think, to speak, and to write—a threefold object easily attained by the discipline of the course recommended. "When one knows how to think," says Condillac, "nothing more remains, in order to speak and write well, than to speak as one thinks, and to write as one speaks."

Letter-writing, so extremely useful through life, having, by the reduction of postage, received considerable encouragement and a new degree of importance, demands more imperatively than ever to be early rendered familiar and easy. Young persons should be required to adopt occasionally for their compositions the epistolary form and style. Whether they reside or not under the same roof with their parents, they should write to them weekly a letter, in which they might give an account of their occupation, and, especially, of their studies during the week, passing from light to serious subjects as they advance in age and knowledge. They may, in these periodical reports, advert to the nature of the books they are reading, express an opinion on their contents, and state the most striking passages in them; they may tell what progress they are making, and what information they add weekly to their stock. By perseverence in this practice, children will acquire a facility in the expression of thought, and will form habits of unreserved and affectionate correspondence with their parents; while the parents will be afforded an apportunity to judge of the progressive acquirements of their children in all the departments of instruction. From not having been early accustomed to epistolary composition, many persons, well informed in other respects, have preserved through life an invincible dislike to letter-writing, and have, by their neglect or procrastination, tortured the feelings of a fond parent, severed the endearing ties of friendship, or otherwise materially injured their best interests. The fate of life often depends on the writing of a letter.

SECT. IX.—GENERAL DIRECTIONS FOR IMPROVING THE LANGUAGE AND UNDERSTANDING OF CHILDREN.

In order to complete the present practical lessons and insure their efficiency in improving the language and the understanding of young people, we will here adduce a few general directions.

Children should be encouraged to state not only what they know, but what they can discover; they should indirectly be made to feel a wish for any information they require; they should be allowed frequent opportunities of asking questions and unfolding their own ideas; they should be desired to account for facts, to state the causes of the effects which they witness, and *vice versa*. They should be

induced to observe particulars, and from these to frame general laws, which may again be applied to the explanation of particulars: such is the ground-work of all philosophical investigations.

Their inventive powers should be set to work in discovering and stating some of the laws of nature, in describing processes of fabrication, and finding out the elements of compound bodies, in enumerating all the properties of an object and mentioning the different modes of applying it to some useful purpose. They may also have various questions proposed to them in the form of problems, such as, to indicate several things similar in one or more points; to find out resemblances, differences, and contrasts between any two objects; to name things which possess in common any given property, and others which have peculiar and distinct properties; to state to what class or species any individual mineral, plant, or animal, belongs; to judge by their senses alone of distances in length, in hight, or in depth; of the dimensions, weights, and capacities of things; of the magnitude of angles, of the length, perpendicularity, and parallelism of lines; to divide a given line or surface into any number of parts; to measure the hight of a tree or building by the shadow; finally, to solve easy problems in geometry and mental calculation, the latter especially, which may be practiced indefinitely and can be adapted to every age. These trials of skill may be rendered objects of playful competition between several children without danger of exciting injurious feelings.

It is when their attention is most excited, that they should be asked to account for facts, to make discoveries, or to solve problems. A few data would then enable them to search for and arrive at the unknown truths. But it is only at an advanced period of the course that they should be made to depend entirely on their own mental resources: they must have previously exercised their attention and gained information, by listening to their teacher; they must have enlarged their powers of observation and language, by examining objects and describing what they have noticed in them, before they can be expected to enter successfully into serious investigations.

As one of the chief objects of these lessons is to acquire a command of words, young people should not be allowed to answer in monosyllables; or rather, questions should be put to them so as to require more than a mere word of assent or dissent. A single *yes*, or *no*, often proceeds from a want of due consideration of the subject. Let them be encouraged to express their doubts freely on every subject, and the debates arising therefrom will be most profitable, provided the confidence and vivacity with which they are car-

ried on be tempered by modesty and courtesy; they will remove that awkward diffidence which, when not early counteracted, often proves an obstacle to success in after-life. They must also be guarded against a spirit of argumentation. The exercise of faith should precede the conviction of reason: there are many qualities and phenomena, both in the material and the spiritual world, whose existence is certain, although their cause is occult. The habit of admitting only what has been demonstrated, is prejudicial to the acquisition of solid and extensive knowledge, especially at a time when the judgment is as yet feeble and incomplete, since man, in the full vigor of his intellect, is himself often obliged humbly to submit to many truths which his reason can not apprehend.

In training young persons to the exercise of their reason and to the expression of their thoughts, no question should be put to them for the solution of which they have not sufficient data; nor should they be asked the same thing to weariness. In the first case, they are discouraged; in the second, they are wearied; in either case, time is lost and the object is frustrated. Questions are put to a child, in order to ascertain if he understands what has been explained, or to lead him, by a series of inductive facts with which he is acquainted, to those which are unknown; beyond that, he should not be teased with catechising. Children dislike cross-examination as much as adults.

The instructor must not forget that, if the business of children is to acquire knowledge and find out truth, his own consists in imparting it, or assisting them in the discovery. In giving them the benefit of his own experience, he must be sure that he has communicated sufficient information to put them in possession of the clue that may lead them to the facts the discovery of which is proposed to them. He must refrain from saying too much, lest his pupils should acquire habits of indolence and thus neglect the exercise of their own faculties: besides, it is injurious to overload the memory of young people and to surfeit them with any species of knowledge. Nor should the conversation be allowed to wander too frequently or too far from the main subject of the lesson; it should not degenerate into vague talk, or be engrossed by a consideration of trifling matters, or of those familiar notions which intrude themselves on the senses, and the knowledge of which is infallibly gained in the natural course of ordinary life. A judicious instructor will know how to avoid empty minutiæ, when to check the idle questions of his pupils, and how far to pursue an investigation; he will convey instruction at the time and in the manner in which it is most likely to interest and to make vivid and lasting impressions.

It may sometimes happen that the instructor will be at a loss how to explain certain facts, or answer questions proposed by a child; he may also commit mistakes, either from not having previously given his attention to the subjects incidentally introduced, or from some erroneous notions imbibed in the early period of his life. Whatever may be the cause of his deficiency or of his error, he should never hesitate to acknowledge it: he will thus set his pupils an example of candor and modesty. If, by never confessing ignorance, he seems to assume universal knowledge, his pupils will despise him the very first time they find him in error. He should join in efforts with them to discover the truth which is the object of their investigation; and when his own resources fail him, an encyclopedia or work of general knowledge, which should always be at hand, will, in most cases, supply his deficiency. The emulation thus generated between the teacher and the learners, will have the happiest effect on the moral character of the latter. Let no false shame prevail on him to attempt an explanation, when he does not feel conscious that he possesses a thorough knowledge of the subject which the accidental transitions of conversation may bring under consideration.

If a young inquirer asks, "Why can we see through water?" he is not unfrequently answered, "Because it is *transparent*," (that is, because it can be seen through;) and thus he is given the name of a property for an explanation of a phenomenon; he is taught to take words for ideas. Ignorance in a child is far preferable to false notions, as scarcity of food is preferable to poison. He who has not obtained the information he required, is conscious of his ignorance, and may yet be enlightened; but he who has been badly taught, and is unconscious of his error, is likely to remain ignorant.

Whenever the instructor has exhausted his information on a subject, or feels unable to answer the inquiries of his pupils, he may, instead of leading them astray, take advantage of the circumstance to inspire them with a taste for reading. This he will do, if he apply to the book which contains the desired information and read it to them; for these occasional readings will tend to foster in children a conviction of the importance of books, and will show them where and how they can, at a future period, obtain the information they require. In any case, let him often refer them to books as the sources from which they can always derive most valuable and complete information. "Read and you will know," was a direction often addressed to Sir William Jones, when a child, by his mother; and to the observance of this maxim this great linguist acknowledges him-

self indebted for his subsequent attainments. "A love of reading is the greatest blessing education can bestow."—*Mrs. Child.*

These familiar conversations furnish many opportunities of discovering what is the pursuit or vocation for which children have most taste or aptitude. The constant and unrestrained intercourse which they establish between them and the preceptor will afford him the means of discerning the peculiar character of each, and of exercising for its proper direction an influence the more powerful, as it will be unperceived. But we need not enter into further detail on this point; for it would be impossible to specify any regular or general course to be followed. There can be no method but that of perpetual self-adaptation to the ever-varying moral and intellectual circumstances of pupils and teachers. The nature of the instruction changes with the age and disposition, as well as with the social position and the intended avocation of the learners. It is also considerably modified by the habits and favorite studies of the instructor: his mind, his heart, his manner, his language and information will exercise an irresistible influence.

He who loves children will always keep up these conversations in the manner that will be most interesting, and consequently most profitable to them. For this reason, a parent who can daily devote some moments to this exercise, would be the most likely to succeed. There are few parents, whatever be their social position, who could not greatly improve their children by giving them the benefit of their own experience: no one can be at a loss for information to be conveyed to such inexperienced minds. Whoever undertakes these conversations will soon perceive that materials continually accumulate, and that many objects are rich in the means of instruction, which, at first sight, appeared to be barren or inexplicable.

The humblest individual may, if he only have a correct judgment, undertake these lessons on objects. However, a person of highly cultivated mind would have greatly the advantage; but, he should in the beginning lay aside the loftiness of thought and range of language to which he has been accustomed. He should condescend to become a child again, at the same time that he avails himself of all the useful knowledge which he possesses for the benefit of his young hearers. He should communicate information in an earnest, impressive and attractive manner, so as to command their attention. He should rouse their curiosity by the recital of the marvelous, and occasionally raise their imagination by the poetical. He should withal be of a pious frame of mind, so as to connect religious and moral impressions with his instruction.

The well-informed and judicious preceptor, who sincerely desires to secure to his pupils the end proposed from these conversations, and who possesses the invaluable talent of adapting his manner, his language, and his instruction to the age and dispositions of his pupils, will not fail to interest them. The natural curiosity of children will become in his hands a powerful instrument by which to rivet their attention; and he will exercise over their physical, moral, and intellectual faculties an influence which he can, at will, turn to their improvement in every department of education.

From these remarks, it is obvious, that, if parents themselves can not fulfill the intentions of nature, by imparting to their own children the first principles of education, they can not be too careful in the choice of the person under whose direction they place them. When the young are to be taught the first notions of morality, the elements of knowledge, the import of words, and the use of language, then a moral, skillful, and accomplished preceptor is indispensable. The false notions and bad habits, which, under an incompetent person, they would be likely to acquire, could hardly be got rid of through life. Their great task, afterwards, would be not so much to learn as to unlearn; and, perhaps, they would for ever have to lament the vague ideas which they, at first, attached to expressions, the incorrect associations which they formed, the confused mode of thinking which they adopted, and the unmeaning or vulgar phraseology which they acquired.

SECT. X.—BENEFITS AND IMPORTANCE OF THIS COURSE OF ELEMENTARY INSTRUCTION.

These conversations are admirably calculated for inuring the young to mental labor, and preparing them for future exertion in every walk of science and literature. There is not a subject which could not, by easy transition, be entered upon, no information which could not be introduced. Things the most familiar, circumstances the most trivial, may give rise to instructive and interesting observations, and to the highest contemplations. Any object in the house, in the street, or in the fields, a toy, any thing which is within reach, or within view, all that nature has produced, or art has modified, can be made a subject of reflection. The humblest as well as the noblest objects in creation, may furnish inexhaustible topics of conversation, and lead, by a contemplation of the works of the Creator, to the manifestation of His infinite power, wisdom, and goodness. With so many subjects capable of exciting the curiosity of children, of captivating their attention, unfolding their faculties, and enriching their minds, how can people hurry them into Latin for want of more suitable employment

The abundance of matter in these lessons always affords the means of making instruction interesting to young people. Every new object which is submitted to their examination becomes valuable, not only because it exercises the mind and gives positive information, but also because the facts to which it leads are necessarily connected in their minds with similar facts previously ascertained. The more numerous the facts which children collect, the more will their judgment be rectified and invigorated, and the more clear and extensive will be their knowledge of words.

When the information which is usually gained from experience is abandoned to nature and to chance, error mixes itself with truth: a random observation leads to imperfect notions and false conclusions. It is the privilege of the foregoing practical course to obviate such evils. Under the direction of an enlightened parent, or of a properly qualified instructor, it will be productive of many advantages: the lessons may be light or serious, short or long, according to the age, capacity, and previous knowledge of those to whom they are given. They furnish means both for physical and intellectual development, for they are addressed to the senses and to the mind. They lead to habits of minute observation and patient investigation; they direct the power of association to useful trains of thought; they impart to all the faculties strength, acuteness, and accuracy. The spirit of inquiry implanted in human nature by divine Providence, and often checked by untimely book instruction, is, in these lessons, rationally encouraged and directed, so as to make young persons take an active part in their own education. Thus, early accustomed to observe, compare, reflect, and judge for themselves, they will preserve through life the useful habit of examining every thing, will draw correct inferences from all that passes within their sphere of observation, and will be likely, from this practical logic, to take a greater interest in the abstract precepts and metaphysical speculations of science.

Not only can conversations on objects impart valuable information and make science interesting, but they are the best preparation for scholastic instruction, for the study of foreign languages, and for all philosophical pursuits. The variety of subjects which is offered to the consideration of children, and the active part which they take in the conversations, suit the liveliness and buoyancy of the first period of life much better than reading, which condemns them to a mental calm and physical immobility, in direct opposition to the imperative demands of nature. Truths which appear dull in the solitude of the study, become most interesting when discussed in conversation.

Oral instruction presents, at an early age, several advantages over book instruction: it is capable of being made more intelligible; it permits the entering into more minute details, employing more familiar terms, and using repetitions which serve to impress the subject better on the mind of a child. The inflections of the instructor's voice indicate the degree of importance to be attached to the words he uses, or to the ideas he conveys. He passes rapidly forward, or dwells on such particular statements as he conceives are needed by his pupils.

These lessons cultivate in young people the talent of rational conversation, which, in ordinary education, is entirely left to chance, although it is the most useful, the most social, and the most intellectual of all talents. They impart the free excursive acquaintance with various learning which makes the pleasing and instructive companion, and if they were generally adopted, they would not fail, in the course of time, to raise the tone of conversation in society. The powers of language of the learners being constantly called forth in proposing and answering questions, in stating the results of their observations, and in making verbal or written summaries of the subjects on which they have conversed, they will necessarily acquire great facility of expression in connection with great clearness of thought. And if they excel in conversation they have every prospect of success in public speaking.

The variety of sensations and the pleasing action of the mental faculties throughout these animated lessons, will, by rousing the creative powers of imagination, produce fertility of thought and aptitude for extempore speaking. Under the influence of the agreeable emotions, arising from the contemplation of nature and the admiration of its wonders, the power of association in the young will retain that vividness and that freshness which are the life-springs of eloquence. The most beautiful images of oratory are those which it borrows from the material realities of nature. The more diversified the instruction, the greater will be the number of ascertained facts, and the more extensive the command of language. Expressions and facts thus treasured up by the mind will remain ready for future use. So deep and lasting are the impressions and associations of early life that they are vivid in the recollection of a person advanced in years when those which were received in maturity have long since vanished from the memory.

The advantages of this practical course of elementary instruction are not confined to the mere acquisition of facts: they are multiplied by the infinite resources it offers to the mind for coming at new facts

and guarding from the prejudices which result from a narrow circle of observation. The early exercise of the senses, in connection with the cultivation of the intellect, open the mind to conviction, by furnishing frequent opportunity of knowing that to be true which, at a previous period, appeared improbable. A young person is led to conclude that there are in nature many laws and phenomena yet unknown to him; in other words, he learns to distrust appearances and to desire the experience of others to corroborate the testimony of his own senses and his own reason. This feeling will naturally awaken in him an eager curiosity to know what others have thought and written on the same subjects. He attaches to the facts which have not come within his observation and are communicated to him, the degree of probability which is due to them, and which he is enabled to appreciate, not only from his acquaintance with similar facts, but also from the habit he has acquired of tracing back the causes which may produce analogous effects. Neither blind skepticism, nor weak credulity can be the portion of him who is accustomed to careful observation and mental activity; who, in the search after truth, depends as much on the data furnished him by his own reason and his own senses as on the testimony of others.

It has been justly remarked by Dr. Beattie, that a mind prepared by proper discipline for making discoveries of its own, is in a much higher state of cultivation than that of a mere scholar who knows nothing but what he has been taught. The method of instruction above unfolded admirably answers this idea of intellectual education; it will be found the most efficient means that can be devised to render the mind a fit instrument for discovering, applying, and obeying the laws of the Creator. It will scarcely be disputed that investigation of the works of nature and of man, observation of the facts and phenomena of the material universe, intimate acquaintance with the properties of things, and insight into the laws of the moral, intellectual, and physical constitution, are as far superior to the exclusive study of words, as the substance is superior to the shadow. It is impossible to calculate the benefits which would accrue to a nation, if all its families and schools were to send forth their hundreds and thousands thus educated.

NOTE.

TABLES OF PROPERTIES PERCEIVABLE BY THE SENSES.

As a specimen of the Tables alluded to in the text, we here subjoin adjectives denoting the principal properties of matter, which are discernible by the senses. Incomplete as these tables are, they sufficiently show what a valuable stock of information and language may be acquired by young people at an early period of life through observation and judicious exercise of the physical faculties.

The act of investigating, in various objects, the existence or non-existence of the qualities or properties which these adjectives suggest, will enable children to examine things more minutely, and will supply their inquisitive and reflective powers with facts upon which to exercise their activity. On the other hand, the act of ascertaining the exact import of these adjectives by their contrasted signification, by due attention to their prefixes and affixes, by a perception of the properties themselves, and by reference to the respective organs under whose cognizance they come, will not only improve their powers of observation, discrimination, and description, but will also enrich their minds with useful information, and tend to do away with that confusion of terms which is so common in ordinary conversation.

Independently of the general properties which are mentioned here and which belong in common to different objects, there exists a very considerable number of others which are peculiar to the things they characterize, and which take their names from these very things; thus we say, speaking of colors, *lavender*, *puce*, *flesh*, and *peach color*, *sky-blue*, *olive-green*, &c.; of forms and other properties cognizable to the sight and feeling, *hairy*, *shaggy*, *woolly*, *scaly*, *oily*, *greasy*, *thorny*, *velvet-like*, &c. The perceptions of hearing, taste, and smelling, vary equally with the endless diversity of things which come under the cognizance of these senses, and are designated by the mention of the objects in which the peculiar property resides.

In contrasting adjectives, in the following tables, we considered only their proper sense: many of them, if taken figuratively, would admit of other words in opposition. It must, however, be stated that, from the poverty of language in some instances and its superabundance in others, some adjectives having more than one opposite, the professor should explain such anomalies and point out to his pupils their different shades of meaning.

QUALITIES AND PROPERTIES ASCERTAINED BY THE ORGANS OF SIGHT.

Visible	invisible.
colored	colorless.
transparent	opaque.
brilliant, bright	dull.
clear	obscure.
light, lightsome	dark.
clean	dirty.
sublime	ridiculous, burlesque.
magnificent	paltry.
superb	mean, shabby.
beautiful	horrid.
handsome, pretty	ugly.
nice	nasty.
graceful	ungraceful.
blooming	withered.
limpid	muddy.
young	aged, old.
organic	inorganic.
porous	imporous.
compact	loose.
fusible	infusible.

FEELING.

palpable	impalpable.
tactile	intactible.
tangible	intangible.
warm	cool.
hot	cold.
burning	freezing.
ponderable	imponderable.
ponderous	imponderous.
heavy, weighty	light.
dry	wet.
hard	soft.
rough, rugged	smooth.
strong	weak, frail.
firm	feeble.
solid	liquid.
solid	fluid.
tough	tender.
stale	fresh.
tight, tense	slack.
stiff	flaccid, limber.
compressible	incompressible.
impressible	unimpressible.
accessible	inaccessible.

SIGHT.

inflammable	uninflammable.
combustible	incombustible.
vertical	horizontal.
perpendicular	oblique.
uniform	multiform.
solitary	gregarious.
septentrional, northern	meridional, southern.
oriental, eastern	occidental, western.

SIGHT AND FEELING.

long	short.
wide	narrow.
high	low.
deep	shallow.
thick	thin.
big, large	small.
enormous	exiguous, tiny.
solid	hollow.
full	empty.
delicate	clumsy.
fine	coarse.
even	uneven.
acute	obtuse.
sharp	blunt.
pointed	rounded.
straight	crooked.
moving	still.
movable	immovable.
restless	motionless.
steady	unsteady.
rapid	slow.
flexible, pliant	inflexible.
elastic	inelastic.
permeable	impermeable.
pervious	impervious.
soluble	insoluble.
dissoluble	indissoluble.
malleable	immalleable.
ductile	inductile.
destructible	indestructible.
destructive	conservative.
contiguous	separate.
adjacent, close	distant.
internal	external.
superior	inferior.
anterior	posterior.
divergent	convergent.
limited	unlimited.

FEELING.

convenient	inconvenient.
handy	unhandy.
tenacious, adhesive	brittle, fragile, frangible.
commensurable	incommensurable.
measurable	immeasurable.
astringent	emollient
divisible	indivisible.

SIGHT AND FEELING.

Forms.	*Parts.*
rectilinear.	inside.
curve.	interior.
circular.	outside.
semicircular.	exterior.
elliptical.	beginning.
parabolical.	middle.
oval.	center.
spiral.	end, extremity.
flat.	top.
convex.	bottom.
concave.	summit.
plano-convex.	foot.
angular.	base.
triangular.	front.
quadrangular.	back.
square.	side.
pentagonal.	face.
hexagonal.	right side.
heptagonal.	left side.
octagonal, &c.	wrong side.
polygonal.	circumference.
oblong.	surface.
rectangular.	border.
spherical.	edge.
hemispherical.	brim.
globular.	corner.
spheroidal.	angle.
conical.	solid angle.
pyramidal.	spheric angle.
cubic.	reentrant angle.
prismatic.	molecule.
cylindrical.	organs.
semi-cylindrical.	limbs.
annular.	head.
tubular.	fibres.
	&c., &c.

HEARING.

audible	inaudible.
sonorous	soundless.
noisy	silent.
euphonic	cacophonic.
musical	unmusical.
harmonious	unharmonious.
melodious	dissonant.
concordant	discordant.
loud	low, faint.
high-toned	low-toned.
ditto	deep-toned.
shrill	obtuse.
treble	base.
acute (fig.)	grave (fig.)
sweet (fig.)	harsh (fig.)
flat (fig.)	sharp (fig.)
articulate	inarticulate.
accented	unaccented.

TASTE.

palatable.
unpalatable.
tasteless.
sapid.
insipid.
luscious.
sweet.
sweetish.
saccharine.
bitter.
salt.
saline.
tart.
sour, acid.
sourish.
acetous.
acrid.
spicy.

SMELLING.

odorous.
inodorous.
odoriferous.
fragrant.
perfumed
aromatic.
balmy.
musky.
rancid.
fusty.
fetid.
musty.

HEARING.	TASTE.	SMELLING.
piano . . . forte.	peppery.	
legato . . . staccato.	savory.	
crescendo . . diminuendo.	relishing.	
deafening . . } enlivening.	delicious.	
stunning . . }	succulent, juicy.	
grating (fig.) . . soothing (fig.)	pungent.	

SEVERAL SENSES.

perceptible . . imperceptible.	hurtful . . . harmless.
distinct . . . indistinct.	variable . . . invariable.
simple . . . complex.	changeable . . unchangeable.
elementary . . compound.	mutable . . . immutable.
natural . . . artificial.	alterable . . . inalterable.
essential . . . accidental.	separable . . . inseparable.
absolute . . . relative.	penetrable . . . impenetrable.
generic . . . specific.	durable, lasting . evanescent.
good . . . bad.	permanent . . transient.
agreeable . . . disagreeable.	simultaneous . . successive.
useful . . . useless.	coherent . . incoherent.
advantageous . . disadvantageous.	concrete . . . abstract.
profitable . . unprofitable.	similar . . . dissimilar.
perfect . . . imperfect.	valuable . . . valueless.
complete . . incomplete.	intrinsic . . extrinsic.
principal . . . accessary.	sufficient . . . insufficient.
beneficial . . prejudicial.	proper . . . improper.
important . . . unimportant.	avoidable . . } unavoidable.
new . . . old.	} inevitable.
common . . . uncommon.	proportionate . . disproportionate.
ordinary . . extraordinary.	considerable . . inconsiderable.
frequent . . . rare, infrequent.	corruptible . . incorruptible.
dense . . . rare.	imitable . . . inimitable.
homogeneous . . heterogeneous.	sensible . . . insensible.
pure . . . impure.	animate . . . inanimate.
wholesome . . unwholesome.	equal . . . unequal.
offensive . . inoffensive.	

III. SPECIMEN OF CONVERSATIONS ON OBJECTS.

[From Marcel on Language.]

A PERSON who, for the first time, attempts to converse with children on objects, may feel embarrassed how to proceed through the various topics which belong to the natural development of the subject. To remove difficulty on this point, we give here a table of the different topics which may be introduced in succession, whatever be the object offered for consideration.

ORDER OF THE SUBJECTS OF CONVERSATION, WITH THE APPROXIMATE AGE AT WHICH THEY MAY BE ENTERED UPON.

"All things are in every thing."—*Jacotot.*

1.—*Exercise of Perception.*

From the age of 6. { Name of the object; its parts, matter, color, form and species; numbers, fractions.

2.—*Exercise of Observation.*

To be added to the above exercise with children of 8. { Properties and qualities of the object. Comparisons and classifications. Use to which the object is, or may be, applied. Country from which it comes. Mode of production, preparation, or fabrication.

3.—*Exercise of Reflection.*

To be added to the above exercises with children of 10. { Size, weight, durability, and value of the object. Relative positions and distances. History of objects, when introduced, and where found. Oral description of the object. Oral recapitulation of all the subjects which have been treated of in the conversation.

4.—*Exercise of Reasoning.*

To be added to the above exercises with children of 12. { To account for every thing; Why is the object so named? Why such parts, matter, colors, forms, &c., &c.? Distinctions between what is natural and artificial, essential and accidental, absolute and relative, &c., &c. Definitions of terms, and their grammatical classification, deduced from their use. Written descriptions and recapitulations.

An instructor with this tabular arrangement before his eyes, can be at no loss for subjects of conversation. However, lest some obscurity should arise from its abridged form, we will endeavor to explain it by a few remarks on a familiar object. We will select for our illustration a *black lead pencil*, as affording by its extreme simplicity an apparently limited field of observations.

A BLACK LEAD PENCIL.

Whenever the instructor believes that his young pupils know something of the subject to which their attention is directed, he cautiously questions them, as much to make them take an active part in the lesson as to ascertain their deficiencies, and then he imparts to them the information which he finds they require.

1.—*Perception.*

When the object *black lead pencil* has been named, the children are shown its *parts*, which they successively notice and name, viz: *the internal substance,—the black lead; the envelope or external substance,—the wood; the top, the point, the two ends or extremities.* (It so happens that this object has very few parts; others, such as *a book, a house, a ship, a plant, or an animal*, would present a much greater variety.)—*Matter*—the external matter,—*cedar wood*, taken from a tree, *a vegetable substance;* the internal matter,—*black lead, a natural mixture of lead and earth, a mineral substance.* It may be remarked by the instructor that all created things are useful, and that God, in His infinite goodness has endowed us with powers of observation and intellect that we may, by their means, search and discover the use of every thing. *Colors—the light brown*, or *cedar color* of the wood, *the iron grey* of the lead;—the children are made to notice that the outward surface of the wood is darker in color than the part which has been freshly cut; it may be observed here that every color has an infinite number of shades. *Forms*—when new, a complete cylinder; when ready for use, it is taper, either *conical* or *pyramidal* at one end, and *flat* at the other. *Species—a writing black lead pencil*, there are other sorts, *drawing-pencils, black* and *red, soft* and *hard* for different uses, *slate pencils, chalk pencils, hair pencils for painting*, &c. Show the children these different species, if possible. *Numbers*—let them reckon all the pencils which they can collect. What is a gross of pencils? By adding or subtracting from each other various collections of pencils, lead pencils, slate pencils, hair pencils, &c., they will experience that addition and subtraction can be declared only of things of the same kind. *Fractions*—let them show the half, the third, &c., of the pencil; if one-third of it should be cut off, how much of it would remain, &c., &c.? This will suffice for children between 6 and 8 years.

2.—*Observation.*

In addition to what precedes, the following topics will be introduced in conversing with children about eight years old. *Properties*—the pencil is *useful, convenient, graceful*, &c., &c.; the cedar wood is *fibrous, odorous, dull, inflammable*, &c.; the black lead is *bright, inodorous, brittle, uninflammable*, &c. All these facts should be made sensible by experiments, whenever it is practicable, and the words denoting these properties should not be uttered until the latter have been clearly perceived. *Comparisons*, &c.—the children are desired to name objects which resemble the pencil or differ from it in matter, form, color, usefulness, or various other properties; the counterpart or this exercise would consist in mentioning several objects and desiring the children to discover points of resemblance or contrast with the pencil; for example, a *black lead pencil* and *a candle* are both *cylindrical, dull, odorous, opaque, smooth, inelastic, useful*, &c.; they differ in *color, smell, taste, feeling;* the former is *infusible*, the latter is *fusible*, one is *porous*, the other *compact*, &c., &c. *Use, &c.*—pencils are used in circumstances when ink can not be had, particularly in traveling, for taking notes and making sketches from nature, &c. Expatiate on the advantages and pleasure arising from the talent of drawing. *Country, &c.*—black lead pencils are now made in almost every civilized country; but those made in England have the reputation of being the best. The most celebrated mines of black lead are in Cumberland. Some observations on mines and on the geography of England, may be introduced here. Cedar trees, with the wood of which they are usually made, grow in various countries, and especially on Mount Lebanon: this celebrated place would deserve some notice. *Mode of production, &c.*—from the miner who extracted the ore, and from the man who set the cedar seed, up to the person who sold the pencil, an immense number of trades and tools which have contributed to its completion, might be enumerated.

3.—*Reflection.*

Young people should now have their reflective powers exercised in reference to the above subjects. They should not only observe things, and state what they perceive, but they should themselves try to discover the facts which are submitted to their consideration, and to express their opinions on them.

Size.—What is the length of the pencil, its diameter, and its circumference? how many times is the pencil longer or shorter than any given object; let them guess and verify how many lengths of the pencil would go to a foot, a yard, &c.? *Weight*—They try with the hand, compare its weight with that of other objects, and verify with scales. The various standard measures should be explained in reference to these little experiments. *Durability*—This question leads to the consideration of the circumstances on which it depends, viz: the manner of using the pencil or of cutting it, the degree of softness of the lead, the industry or indolence, and carefulness or carelessness of the owner, &c. *Value*—The price of pencils is according as they are sold by retail or wholesale, as they are intended for writing or drawing, according to their different qualities. They are cheaper in France than in England. Besides the intrinsic value, a pencil, like any other object, may acquire an accidental or imaginary value from its being the gift of a friend, and especially of a departed friend, from its having belonged to a celebrated person, or from the great need one has of it. Many interesting moral observations may be made in a digression on tokens of friendship, on the admiration due to really great characters, or on the critical position in which persons are sometimes placed, which makes them attach great value to trifles. The beautiful work of Saintine, "*Picciola*," is founded on this last idea; the lives of prisoners are full of examples of this kind. The well-known exclamation of *Richard III.* in Shakspeare,—"My kingdom for a horse!" might also be adduced. *Relative Positions, &c.*:—The pencil may be placed in a vertical, horizontal, or oblique position; it may be parallel or perpendicular to other objects. It may be observed, in passing, that the words vertical and perpendicular ought not to be, as they often are, confounded one with the other; the former indicates only one direction, that which tends toward the center of the earth, as it is ascertained by the plumb-line; the latter is relative to a second line with which it makes two right angles; its direction may vary indefinitely, according to the direction of that second line. The pencil may form different angles with other objects; it may also be placed at the east or south-east of one thing, whilst it is at the west or north-west of another, &c., thus showing that these are relative terms. End this conversation by desiring the children to describe the pencil so as to give a clear conception of it to a person who may be supposed not to have seen one, and recapitulate all that has been said,—including the digressions to which each point has given rise.

4.—*Reasoning.*

The instructor, in conversing with children of twelve, or over that age, should bring out all their powers of reasoning and of language, in connection with every subject. Why is the black-lead pencil so called? What part of speech is the word *pencil?* What is its derivation? Advert to other grammatical points in reference to substantives. Why has the pencil been given that form or dimension? Why is wood used, and, especially cedar wood? All general practices or customs are founded upon some reason. Why is the outward surface of the wood darker than the inside?—The effects of light and air on matter may be explained. By what mixture of colors could the light brown of the wood be produced? What are the primitive and prismatic colors? Allude to the infinite variety of pleasing colors which are diffused throughout nature, over shells, flowers and minerals, on the wings of the butterfly and plumage of birds, in the broad expanse of the heavens at sunset. How bountiful is the Creator who has

thus profusely ministered to the gratification as well as to the wants of his creatures! The same remarks will apply to the immense diversity of forms and of other sensations. What geometrical figures would be produced by cutting the pencil perpendicularly across, obliquely, or in a way parallel to the axis? In placing the pencil in various positions relatively to other objects, *on* a book, *under* it, *behind* it, &c., almost all the prepositions and their nature can be explained. In enumerating the different kinds of pencils, and the particular qualities or properties which distinguish each kind, a classification will be established; pencil will stand as the *genus*, black-lead pencil, red pencil, slate pencil, &c., as *species*, and the half-worn-out-black-lead pencil in hand as the *individual*. The word *pencil* is then said to be a *generic* term, and the words *lead-pencil*, *slate-pencil*, &c., are *specific* terms. In investigating the properties of the pencil, distinctions will be established between them:—the two substances of which it is made are *natural;* their form is *artificial;* the brilliancy of the lead, and the inflammability of the wood are *essential* to these substances: that the pencil is new or old is *accidental*; the characteristics of the wood which constitute it an inanimate, infusible, and opaque substance, are *absolute;* its dimensions, softness, and porosity are *relative*. The expression *vegetable substance*, which applies to the external matter of the pencil, is *generic* relatively to the word *wood*, which is then *specific;* but *wood* becomes *generic* in relation to *cedar*, which is its *specific*. In comparing the pencil with other objects the children will examine in what quality it equals, surpasses, or falls short of other objects. Here might be unfolded the theory of adjectives and the degrees of comparison. (This species of words affords particular facility for eliciting derivations, because many adjectives are borrowed from substantives, while others give rise to substantives; many also are formed by prefixing or affixing some significant syllable to the names of the things whose characteristic properties they signify.) The verbs used to express the various actions performed with a pencil, such as, *to hold it*, *to mend it*, *to write with it*, &c., will elicit the nature and definition of that important part of speech. The particular circumstances of time, place, quantity, and manner which might be mentioned in connection with these actions would serve to illustrate adverbial expressions. In speaking of the use of a pencil, let the children ascertain why it makes a black mark on paper and not on slate, whereas the reverse is the case with a slate pencil, which marks on a slate and not on paper. In mentioning the mode of making pencils and the countries where they are made, many interesting questions could be introduced on the manufacturing industry of different nations. The superiority of British manufactures in several articles of trade, may be adverted to; but, whilst the instructor thus excites in the breast of his young hearers legitimate feelings of national pride, he must sedulously caution them against any unjust depreciation or contempt of other nations. Finally, every subject may, by the force of association, come within the scope of these conversations. The more extensive the information, and the higher the moral and intellectual character of the instructor, the more beneficial will these lessons be to young people.

The few suggestions which have been offered in this specimen of a conversation on objects will, we hope, be deemed sufficient as a guide for applying to any object this scheme of intellectual training and practical instruction. We have only hinted at the various topics which directly arise from the different modes of considering an object, and have left to the skill and discretion of the instructor the numberless subjects, moral or intellectual, which may branch out of each question, because the advantage of digressions entirely depends on circumstances which he can best appreciate. Every teacher may diverge from the course laid down here, or dilate on such subjects as he feels himself most competent to treat, and on such also as he finds that his pupils desire or require to be informed upon.

IV. M. GUIZOT'S MINISTRY OF PUBLIC INSTRUCTION.

(Continued from No. XXVI. p. 280.)

II. SECONDARY INSTRUCTION.

In laboring to establish a system of secondary education, in which the rights of old institutions and the liberty of education guaranteed by the charter should be harmonized, I found myself engaged with a vast establishment, thoroughly founded, systematic, complete, and in full activity; and also with the numerous and powerful rivals, I will not call them enemies, of that institution, passionately demanding full liberty of action for themselves. The freedom thus claimed presented itself as a new fact to the body against which it was directed, and one entirely opposed to their origin and constitutive principles. Founded in the spirit of the maxim that education belongs to the state, the university reposed on its double basis of privilege and absolute power. I was therefore called upon to introduce liberty to an institution where it had no natural existence, and to defend that institution, at the same time, against formidable assailants. This was, in fact, to preserve the fortress while opening its gates.

The university had two classes of opponents, almost equally distinct and determined. The liberals, who taxed it with despotism; and the devout, who accused it of irreligion. Its constitution, and I might even say its physiognomy, were repugnant to the former; they disliked this educating body which reminded them of the old corporations they had so strenuously combated, and shrank from the forms and discipline which trained up the rising generation in the military system they detested in the state. The zealous Catholics had no confidence in the religious opinions of a great number of the masters of the university. They regretted the old associations in which religion and education were closely linked together, and struggled to revive them to confide their children to their care. Several of these societies, in fact, more or less disguised, had reëstablished themselves under the Restoration; and to insure their success, their partisans incessantly assailed the university, which they represented as being imbued with the irreligious spirit of the eighteenth century, and engaged in disseminating amongst the youth of the day, if not impiety, at least indifference.

In these attacks there was much injustice and some ingratitude. The government of the university, whether head master or general council, minister or president, had always exercised its power with signal moderation. At the same time rival and controller of all private establishments of secondary instruction, it had superintended them without jealousy or

severity, sanctioning them wherever there appeared a prospect of legitimate success, and never without powerful reasons aiming a blow at their stability or liberty. In the midst of general despotism, and despotically instituted itself, the university exhibited a just and liberal administration.

The position of the university was not less delicate in regard to religion than to liberty. Its government had always fostered the religious sentiment. In the general course of instruction, in the choice of masters, in its daily exercises, religious objects and considerations had ever occupied an important place. But the ruling incentive in this line of conduct was the advancement of social order rather than faith; reaction against revolutionary unbelief was stronger than the return toward Christian piety. Honest services were rendered to religion without expelling indifference from the soul. In the present day, it is a common conclusion that when the full exercise of its rites and ceremonies is secured to the church, when its temporal wants are provided for, and outward respect manifested, all has been done that could be desired, and that we have a right to expect in return every thing that allies can require from each other. A profound mistake. Religion is not content to be looked upon as an implement of order, and a great social advantage. She has a more lofty idea of her delegated trust. She requires to believe that her political associates are also faithful disciples, or at least, that they should understand and truly respect her divine character. And when not thoroughly convinced that these are the true sentiments entertained toward her, the church stands upon reserve, and even while rigidly discharging her duties, withholds her devotedness.

Engaged in conflict with the official leaders and daring volunteers of the church, the university was unable to find, even in laical society itself, the support it had a right to expect. Not only did many Catholic families participate in the religious mistrust manifested toward it by the clergy, but the ardent liberals persisted, on their side, in taxing it with bigotry as well as despotism. By reason of its essential character, and from the idea that had presided at its foundation, it encountered, within a certain sphere of French society, but little confidence and sympathy. When the Emperor Napoleon, in creating the university, commanded it as the leading object of its mission to employ all its resources and reputation in the advancement of secondary instruction, of classical and literary studies, he was actuated by a profound instinct of our social condition, of its history, its nature, and its wants. He knew that after the astounding overthrow produced by our revolution, after the violent fall of all the higher ranks and institutions, in the midst of so many new and sudden fortunes—to sanction in some degree the triumph of the middle classes, and to assure their influence, it was necessary to cultivate and develop amongst them elevated studies, habits of mental exercise, learning, and intellectual superiority; and by these means to make them appear, and render them, in fact, worthy of their position. It was necessary, too, that at the same moment when new France proved her strength,

and covered herself with glory in the battle-field, she should undergo the same trials, and achieve corresponding fame in peaceful civilization. Magistrates, administrators, advocates, physicians, eminent professors, men of science and literature, are not alone internally essential to a nation, but they are indispensable to its dignity and credit in the world. The university was especially dedicated to the advancement of the higher order of the middle classes in these influential avocations. Many families of the old French nobility regarded with ill will this center of activity and social strength, in which the citizens raised themselves to the level of their toilsome destinies, and still hesitated to venture their children in this common arena, to acquire there the same means of success, and to prepare themselves by intelligence and labor to resume their places in the state.

It was in presence of these facts and opposing interests that I undertook to prepare and submit to public debate, this bill on secondary education, or rather to determine once more, for public instruction in France, under its most difficult aspect, the eternal problem of reconciliation between power and liberty.

One favorable solution alone presented itself. To renounce entirely the principle of the sovereignty of the state on the question, and to adopt without reserve, in all its consequences, that of free competition between the state and its rivals, laical or ecclesiastical, private or incorporated. This course appeared to be at once the most simple, able, and efficacious. It reduced all the enemies of the university to silence by satisfying at one stroke their loudest pretensions, while to remain in the lists, it demanded from them unremitting exertions; for the state also retained the power of giving to its own schools all the development and advantages which social interest or the public wish might suggest or require. None of the contending parties could find any ground of complaint, for they retained the full and free use of all their arms; but it was the state itself which regulated the conditions of the combat, by accepting, while it abandoned empire, the salutary obligation of omitting no efforts to maintain or recover its superiority.

Experience, which usually inculcates reserve and prudence, has taught me a contrary lesson. When we are in the right, we can risk more than we believe we may. It would have been far better for the university to have boldly accepted battle with free rivals, than to reduce itself to the necessity of defending with hesitation its sovereignty and privileges against inveterate enemies. The first shock once over, it would have been in a condition to continue the struggle, not only with success, but credit, and would speedily have emerged from it with added power and dignity.

But every thing under the government of July opposed this complete and daring policy, which notwithstanding its leaning toward the church, the Restoration had never ventured to attempt. An immense majority of the public, I might even say the public unanimously, beheld in ecclesiastical liberty the precursor and instrument of ecclesiastical rule—the

object of universal antipathy and terror. The laical spirit, which had become so powerful, was also bitterly suspicious, and would have doubted its own security, if its rivals displayed, like itself, and possibly in direct opposition, the liberty it had conquered from them. The traditions of the old monarchy came in also, on this point, to second the passions of new France. Our ancient laws on the relations between the state and the church, on the interdictions or fetters imposed on religious associations, were appealed to as the rampart of liberal victories. To these general and historical suspicions, the Revolution of 1830 had added others more distinct and personal. The state and the church are never really in mutual understanding, but when each believes itself sincerely trusted by the other, and when they feel assured that no hostility whatever exists between their essential principles and vital interests. This, unfortunately, had ceased, since 1830, to be the common sentiment between the two powers. They lived in peace, but not in intimacy, exchanging support without confidence or reciprocal attachment. In the very bosom of the church, thus officially linked to the new rule, there often appeared regrets and reserved thoughts favorable to the fallen authority; while the church, in turn, frequently saw itself exposed to the ironical indifference of the disciples of Voltaire, or the savage hostility of the converts of the Revolution. The warm apostles of free education themselves aggravated the obstacles opposed to it by this state of parties and minds. The extravagances of the Abbé de La Mennais, alternately theocratic and revolutionary, redoubled the suspicions and indignation of the most opposite civilians, conservatives as well as liberals, magistrates, lawyers, and students. Any one, who at that time would have ventured to advise the government, in the question of public instruction, to resign absolutely the control of the state, the system of the university, the curbs of the church and religious associations—and to incur without strong precautions the unfettered competition of such a host of rivals (I will not call them enemies), would have been looked upon as a concealed Jesuit, a base deserter, or a blinded visionary.

Without understanding all these difficulties as thoroughly as I do now, I entertained, in 1836, a lively impression of them, and thereupon regulated my conduct both in preparing and debating the bill on secondary education. I concentrated my plan and object on three points: to maintain the university, to establish liberty by its side, and to postpone the opposing questions which the present state of parties and feelings excluded from a profitable or permanent solution. I took the university, its organization and educational establishments, as a great existing fact, good in itself, and capable of being adapted to the constitutional system, but not calling for revived discussion. I submitted it to the free competition of all its rivals, without distinction or reserve, and without imposing on any of them special conditions. I referred to other times and laws the questions which had no essential bearing on the principle I desired to lay down; amongst others, those relating to the small seminaries, religious congregations, and various establishments, clerical or laical,

which had been the objects of special measures either of indulgence or severity.

A bill conceived in this spirit, combined, I will not hesitate to say, disinteredness and courage. By firmly supporting the university, while frankly admitting liberty, I encountered at once the attacks of the opposing liberals, and of a considerable number of my conservative friends. By shutting out from debate the university and the exceptional rule of certain ecclesiastical establishments, I closed the arena against new systems and old passions. My bill assumed the aspect of timidity mingled with obstinacy, and I reduced myself to the defence of positions formidably menaced on every side, instead of encountering the gratifications and chances of a great war in the open field against one class of enemies alone.

The debate taught me that in spite of my prudence in the enterprise, I had been too sanguine in my hope. M. Saint-Marc Girardin, by order of the committee of the Chamber of Deputies, drew up an able report, a model of the art in which he excels, of marching to battle by sometimes verging from the direct road either to the right or left, and by drawing advantage alternately, with impartial complaisance, from contrary ideas, without either deserting his own or entirely adopting them. This report, while introducing an ample allowance of modifications into the bill, confirmed nevertheless its principles, and made no change in the essential results. When the debate came on, M. de Tracy and M. Arago, the first with honest regret, the latter with a certain infusion of learned display and labored pleasantry, attacked the bill as incomplete, restricted, and solely calculated to repair here and there the edifice of the university, when it was necessary to construct a grand and comprehensive system of public education. They explained their own views, and the nature of the bill they would have introduced, much more fully than they discussed the measure now before the Chamber. I felt little alarm at these general and vague attacks, which left untouched the fundamental question my bill proposed to solve. But before long, members of inferior renown, and not all identified with the opposition, directed their assaults against this delicate point. Uneasy as to the consequences of liberty, and above all, of ecclesiastical liberty, which in their eyes amounted to public instruction handed over to the Jesuits, they demanded on the one hand, that the small seminaries should be subjected to all the conditions imposed by law upon private secondary schools; and, on the other, that every head of such establishments should be compelled, not only to take the political oath, but to swear also that he belonged to no unauthorized society or corporation. I succeeded in throwing out the first of these amendments, but the second was adopted. This amounted to imposing on the liberty of the Catholic church and its militia, personal restrictions in educational matters, while it took from the proposed law the leading characteristic of sincerity and common liberal right with which I anxiously desired it should be impressed.

M. de Lamartine, who at that time neither ranked amongst my adver-

saries nor friends, was the only one of the orators taking part in the debate who perfectly comprehended the importance of this feature, or the merit of the bill to which it belonged. "I have heard," he said, "for several days, many members holding different views, declare that they will black-ball this bill. I am sorry for it. Some are prepossessed with that phantom of Jesuitism which is incessantly conjured up here, and which must be declared more powerful than ever, if it can induce us to recede before liberty. Others seem to apprehend that the clergy may appropriate to themselves the exclusive education of our youth, and that the spirit of the time, represented by the university, may exercise a monopoly over the traditional and religious element represented by educational societies. It is exactly on account of these disagreements between opposing parties that I shall vote, and conjure the Chamber to vote for this bill, under a more certain conviction. What! after seven years of expectation, after a revolution made to acquire this very right of free instruction, after it has been called for by men of the most contrasted views, and inscribed in the charter as a synallagmatic condition of the government of 1830, are we going to reject it from the hands of the sincere and courageous minister who offers it, and to induce France and Europe to suppose that the sphere of liberty is not wide enough for all, and that we wish to restrict it to ourselves alone? No, gentlemen, this is not possible. Let us hasten, in spite of all objections, in spite of this impolitic oath, and these restrictions, more or less oppressive; let us hasten, I say, to pass this bill. It is a pledge of liberty which all parties place involuntarily in your hands, against religious intolerance or atheistic tyranny; and which can never, at a future period, be wrested from us."

The law eventually passed in the Chamber of Deputies. But, a few days after, the cabinet fell, I left office, and my bill subsided with me, without going to the Chamber of Peers. If it had remained, such as I first presented it, perhaps, notwithstanding a few incoherencies and gaps, it might have sufficed to settle the question of free education, and to prevent the deplorable contest of which that question subsequently became the object. But through the amendments to which it was subjected, the bill, by restraining the liberty promised by the charter, expressly from the church and its officials, added fresh venom to the quarrel instead of bringing it to an end. The failure called for no regret.

By the same bill I had undertaken to follow up the solution, already commenced in my law for primary instruction, of a question which has recently been much discussed; that of the intermediate and practical training which applies to employments and social positions important from their number, activity, and influence, to the strength and repose of the state. Superior elementary schools formed the first degree of this department of teaching intended to become more complete and special in the communal colleges of the second class, and to occupy a place in the great colleges of the state and the cities, without detriment to the higher order of literary and scientific instruction, essential and of necessity com-

mon to all liberal professions. Liberty of general education, with the development of intermediate teaching, were the two vital principles of the bill: they fell together.

I shall say nothing here of a multitude of special measures, of which, during the four years of my administration, the establishments for secondary education were the object. The great problems of that important degree of popular teaching are the only ones on which I have at heart to recall, with accuracy, my views and labors. My position in that respect, and I have already stated it, was much more complicated and difficult than in the matter of elementary instruction.

III. SUPERIOR INSTRUCTION.

My office as minister of public instruction became infinitely more agreeable when the subject under debate was superior education, than when confined to the elementary or secondary branches. I encountered no strong public opinion pressing me to some new and general work in the higher department. There, I had neither to contend with an ardent appeal to liberty nor with embittered emulation. In mathematical and physical science, the superiority and independence of the French schools were acknowledged. In letters, philosophy, and history, our public teaching had very recently displayed itself with success, and given proofs of freedom.

Undoubtedly superior instruction at Paris wanted nothing either in vigor, dignity, or reputation. In the university, the faculties of literature, science, law, and medicine, had many different chairs occupied by eminent men. Beyond the university, and unconnected with its system, the college of France, the botanical garden, (*Jardin des Plantes,*) the various special seminaries, secured the independence and extension of superior teaching, and prevented either the exclusive spirit or routine of any single body from taking possession of it. In the choice of masters and in the system of instruction itself, merit and liberty were not without guarantees. Either by presenting candidates, or by direct coöperation, the educational and learned societies, the faculties, the special schools, and the Institute, exercised a proper share of influence in the nominations. The government neither interfered nor pretended to interfere with the teaching, beyond the appointment of professors according to the established rules, and the maintenance of public order in the courts. Neither practical efficiency for the youths intended for the different liberal professions, nor intellectual luxury for the amateurs of mind and science, were wanting in these combined sources of superior instruction. Nevertheless, according to my judgment, they were, as a whole, far from being adequate, throughout the entire land, to the serious necessities of French civilization, and above all, to the moral development of the generations verging on the age of manhood, and ready in time to assume their part in the destiny of the country as in their own personal fortunes. There were still important deficiencies in regard to national intelligence, liberty, and morality, unheeded by the public, but with which I was deeply impressed and felt an anxious desire to supply.

I was cautious, however, not to commence at once the reforms and innovations I proposed. In the various departments of government, public instruction is, perhaps, of all others, the one which most requires the minister to conciliate the opinions of those who surround him, and to secure their support in his undertakings; for they possess the rights, and sometimes the pretensions of men of intelligence by profession, accustomed to the constant and free use of reasoning and reflection. In no other branch of administration do the choice of agents, the relations between the leader and his associates, personal influence and mutual confidence, perform such important parts. Before entering on the difficult questions in superior education, as yet undisturbed, I was desirous of finding amongst the masters of the principal schools, not merely fellow-laborers but friends, disposed and able to second me.

The course of events soon supplied natural opportunities. During the first year of my ministry, four chairs, those of the Greek Language and Philosophy, of the Sanscrit and its Literature, of French Literature, and of Political Economy, became vacant in the college of France. The professors, by whose deaths the vacancies occurred, Messrs. Thurot, De Chézy, Andrieux, and J. B. Say, enjoyed honorable reputations in the world of letters; some were even celebrated and popular. They required adequate successors. I could only select them from amongst the candidates, proposed by the college of France and the Institute. I had reason to expect, for two of these chairs at least, contested presentations, which would devolve on me the embarrassment and responsibility of choice. I am almost unconscious of embarrassment, and I have no dread of responsibility. The chair of the Sanscrit Language and Literature was no object of competition. Presented both by the college of France and the Academy of Inscriptions, still young, and destined to die at an early age, exhausted before his time by the enthusiasm and labor of science, M. Eugène Burnouf was as if named beforehand by all the learned orientalists of Europe, and I could only enjoy the pleasure of officially confirming their suffrage. For the chairs of Greek Philosophy, French Literature, and Political Economy, my position was less simple. Amongst the candidates presented by the college of France, were Messrs. Jouffroy, Ampère, and Rossi, who were known to be my friends, and whose success I openly desired. But M. Jouffroy had engaged in the philosophic combats of the school of spiritualists, excited by Messrs. Royer-Collard and Cousin, against the sensualism of the last century. In place of M. Ampère, the French Academy had proposed, for the chair of Literature, one of their most distinguished members, M. Lemercier, a brilliant poet, notwithstanding his failures, and an eminent critic, despite the irregularity of the greater part of his works. M. Rossi, an Italian refugee, and professor at Geneva, had only, as yet, in France, one of those reputations readily acknowledged, as long as they are at a distance, but which, as soon as they come near, encounters adversaries and rivals. The Academy of Moral and Political Science opposed to this candidate their permanent secretary, M. Charles Comte, a man of solid acquirements and con-

scientious opinions, equally just and firm in character, and the son-in-law of M. J. B. Say, to whom a successor was to be appointed. It was evident that Messrs. Ampère, Jouffroy, and Rossi, could not be elevated to the head of public instruction without exciting active jealousies, and at the risk of exposing the power that placed them there to be charged with the spirit of party and coterie, of personal and of unreasonable partiality.

I hesitated not; and in the face of the discontent and attacks which I foresaw, Messrs. Ampère, Jouffroy, and Rossi, were appointed, with M. Eugène Burnouf, to the vacant chairs.

No one as yet demanded, or at least persevered in requiring that the principle of unrestricted teaching should be applied to superior instruction. In point of fact, the degree of liberty already extensively permitted in that particular branch of national education satisfied the general desire. As a principle, the good sense of the public foresaw the extreme danger, and therefore the impossibility, of according to the first comer the right of opening a place of assembly for all who might follow; of elevating a pulpit there, and of professing openly on all educational matters connected with the higher department, every opinion or idea which might cross the human mind. What were the limits to be assigned to this privilege, and the securities to be required for its proper exercise? These points were rather glanced at than formally laid down, and the authorities were under no practical or pressing necessity of bringing them to a solution. It is exactly at such a moment that it becomes a judicious government to grapple with and determine similar questions, and this they can then do with foresight and moderation, without being driven to a struggle against passions or systems already in full vigor; and by placing strong guarantees for order and public morals in close proximity with a freedom as yet but sparingly familiarized. I felt convinced that, before long, with the natural progress of ideas and institutions, the same amount of liberty would be demanded for superior education as for the elementary and secondary branches, and I was anxious that this desire, when it became pressing, should already find itself regulated and restrained as well as satisfied.

The institution of substitutes in various faculties presented a natural mode of accomplishing this end. These professors, still young, and waiting for vacancies, elected by their masters after the trying ordeal of competition, existed since the year 1823, in the faculty of medicine; and, under the title of deputy lecturers, in that of law, into which they were admitted to assist the professors in actual office. In 1840, M. Cousin, at that time minister of public instruction, extended this arrangement to the faculties of literature and the sciences, and gave it full exercise by allowing these substitutes, in every faculty, to have their own free courses of lectures in common with those delivered by the titular professors of the state. This was exactly what I proposed to do in 1835, with the view of opening to superior instruction, a convenient locality for the principle of liberty. I should probably have regulated the conditions on a different plan from that of M. Cousin. I might have given liberty some

additional securities, in regard either to the opening or suspension of the lectures of the deputies, and have added considerably to the power invested in the faculties themselves, of intervention between the minister of public instruction and the free professors. But in itself, and in its essential provisions, the measure was an excellent one, and had it been carried out in the spirit of its conception, it would have realized, in superior education, one of the principal improvements I proposed to introduce.

On another point of reform, much more important, M. Cousin and I held also similar opinions. I have already spoken in these "Memoirs" of the part I had taken in the decree of the 17th of February, 1815, issued by King Louis XVIII., for the general organization and system of the university. Its object was to uncentralize, as the modern phrase runs, not the government of public instruction, but education itself, and particularly the higher department. It established, much too numerously, private universities, distributed through various parts of the country, in which every section of superior learning was included;—literature, philosophy, history, the mathematics, and physical sciences, law and medicine; the entire range of human knowledge, and all the acquirements necessary for the liberal professions. We can not deceive ourselves as to the following fact: if we cast our looks throughout France, we shall see, everywhere, except in Paris, these noble studies on the decline. While the general level of primary and industrial education exalts itself, that of superior instruction and lofty intellectual development has become abased; and France of the present day, far better provided than formerly with elementary schools and good practical scholars in many classes, contains, beyond the capital, a much smaller number of minds richly endowed and nobly ambitious than she possessed in 1789, when the Constituent Assembly sprang suddenly from her bosom. I place great value on elementary and practical knowledge. It is the daily bread of nations; but the Gospel tells us "man shall not live by bread alone." When nations have become great, and seek to preserve their eminence, the lofty cultivation of the mind ought not to remain a rare phenomenon, concentrated exclusively on the summit of the social system. This, unfortunately, is the state of things at present. Paris morally allures and absorbs all France. Material wealth and comfort increase everywhere, but toward the capital alone minds direct themselves and ambitions aspire. We no longer see in our departments, as in the provinces formerly, men eminent for their intellectual lights and tastes, as for their social position, remaining stationary in their native towns or districts, actively and contentedly employed, disseminating around them the treasures of their knowledge, and the resources of their fortune. Political economists complain that population flows beyond measure toward the great cities; above all, in the direction of Paris. Moralists have even more reason to reiterate the same regret, for the attraction of intellectual life to the metropolis not only tends to enervate and extinguish it in the provinces, but changes, weakens, and corrupts it in the very focus of concentration. A

great nation requires something more than cultivated and enlightened minds. It demands varied, original, unfettered spirits, who labor independently, think without restraint, and continue, while gradually developing their powers, what nature and the particular accidents of their destiny have made them. Now, few minds preserve these valuable qualities, unless when they expand and live where they were born, receiving light from every point of the horizon that presents it, but without removing from the paternal soil. Men can live everywhere, body and soul; nevertheless, he loses by transplantation much of his individual beauty and natural vigor. National unity is admirable, assimilation of weights and measures is good, but uniformity of minds sooner or later leads to their weakness or servitude; a result as much to be lamented for the liberty of a nation as for its honor and influence in the world.

I do not believe that three or four universities, placed here and there at a distance from Paris, could possess the virtue of curing this evil, produced and fomented by so many causes, some of them, perhaps, insurmountable. But of all the remedies available in such a case, this appears to be one of the readiest and most efficacious. Many powerful ties, both of feeling and interest, attach men to the scenes of their birth and infancy, and these bonds exert their empire over active spirits thirsting for study and science, as also upon less aspiring temperaments, whose desires are limited to the cultivation of the fields, or to following, under the natal roof, the business of their fathers. Men who are warmly imbued with intellectual ambition are induced to leave their native town or district, because they can not find there the means of reaching the object to which they aspire, and the enjoyments, when once that end is attained, with which they can no longer dispense. Let there be established in various parts of France, great centers of study and intellectual life, where literature and science may open to their adepts sound lessons, the instruments of their labor, honorable careers, the gratifications of self-respect, and the pleasures of cultivated society: undoubtedly, eminent professors, and young men of rising reputation, will willingly resort thither, where they find so many advantages combined, and within their reach. They will gradually draw after them, and form there, a public animated by similar tastes and sensible of the same allurements; and Paris, without ceasing to be our great theater of literary and scientific activity, will no longer be the abyss in which so many spirits capable of a more useful life, and worthy of a better fortune, are swallowed up and lost.

But to respond to their destination, such establishments require to be complete and distinguished. If scientific or economic parsimony interferes, it will strangle them in the moment of their birth. In these new universities, and their various faculties of literature, science, law, medicine, and theology, (supposing the church to coöperate,) it is essential that the object and number of the chairs should be in accordance with the existing state of knowledge, and that the circumstances of the professors should be made permament, honorable, and easy.

An object so important calls upon the state for the indispensable sacri-

fices. It is moreover, the disposition of our country to doubt the success of innovations, unless they are bold and grand. To obtain a favorable reception for newly founded establishments, much should be done and required. I therefore intended, when proposing to the Chambers the creation of local universities, to explain this scheme of superior instruction in its complete extent, and to demand all the conditions necessary for its success. I had studied the difficult question of the most eligible places in which to revive and encourage such establishments. The four towns of Strasbourg, Rennes, Toulouse, and Montpellier, appeared to offer the most favorable chances, and to satisfy, better than any others, the general necessities of France. I should have introduced, in this respect, a comprehensive bill, with the view of obtaining a complete result at one blow. When M. Cousin, in 1840, attempted the execution of the same idea, he adopted a different line of proceeding, and confined himself to asking for Rennes alone, already endowed with faculties of law and general literature, the creation of two others, in science and medicine, introducing his bill as an experiment and sample of "the great centers of superior instruction which the government intended to create at certain points of France." Even restricted as it was within these narrow limits, the proposal suffered further mutilation. The Chamber of Deputies rejected its most important condition, the establishment of a faculty of medicine at Rennes. A bolder and more exacting bill would, in my opinion, have met with greater success.

A third reform, moral rather than scientific, was, of all my projects with regard to superior instruction, that on which I was most intent.

When I visited the universities of Oxford and Cambridge, one point struck me in particular—discipline united with liberty; the masters present and vigilant in the midst of a community of youths enjoying a high degree of independence, and teaching still continued at the age of emancipation and superior studies. The scholars live—the greater number, at least—within the walls of the different colleges of which these universities are composed; left much to themselves in their private apartments, but taking their meals together; expected to attend public prayers every day, and to be in by a fixed hour at night; subject to certain rules and customs, which recall the interior economy of a family—submission of many to one, and respect for authority—and restrain within strict duties and powerful influences the already effervescing temperament of those fresh generations, who approach the moment when they in turn will assume possession of the world. There are many young men at Oxford and Cambridge, who study very little, lead irregular lives, gamble, commit baneful excesses, and run into debt; there is much liberty, but the rules are in force and make themselves felt. Authority lives in the bosom of freedom, and is present to the mind though it may fail to control the act. It is in small secluded towns, exclusively devoted to study, and far removed from the great centers of population and movement, where educational establishments meet the eye at every turn, and the pupils are incessantly in presence of their teachers, that

the youth of England are trained up, under a special and wholesome system, neither subjected to vexatious exactions nor left to themselves in an undistinguished crowd: moderately enough instructed in certain points, but morally restrained and disciplined at the moment of trying their strength, and in the difficult passage from boyhood to manly maturity.

What a contrast between this system and the position of the youths who hurry to Paris to complete their higher studies, and to qualify themselves for their future professions! On leaving their schools and families, they are thrown into this immense city, alone, without guardian or counselor; entirely emancipated from all authority and restriction, lost in the crowd, and in the obscurity of their lives a prey to all the weariness of isolation, to all the contagious temptations of passion, inexperience, opportunity, and example, without moral check or support, at the exact epoch when they stand in the most urgent need of both. I have never reflected without a profound sentiment of grief on the deplorable condition of the young men who pour in crowds into our great seminaries. No one knows or is able to calculate how many of our children lose themselves entirely under this irregular and unrestricted trial, or what traces of it remain, through the whole course of their after lives on the minds, ideas, and characters of those whom it has not utterly overthrown.

Why should we not place by the side of our great colleges of superior instruction, establishments in which our youths might recognize some traces of the domestic hearth, and would live in a certain communion, with enough of personal independence and liberty, but subject also to prescribed discipline, watched and sustained in their conduct, while assisted and encouraged in their studies? At the head of these institutions should be placed well-informed, respected men, fathers of families, disposed to take a serious interest in the moral cultivation as in the studies of their young guests, or qualified to lead them by personal influence. It was with this view, and almost under this form that those colleges were provided in various provinces, anciently called *nations*, where the students, flocking to the lessons of the university of Paris, resided and lived in common. The forms, regulations, and customs, of such houses must in our days be, of necessity, very different from what they formerly were; but the idea and the result might be the same. The young students would be equally protected from irregularity and isolation. Out of respect to present habits and manners, I would prescribe nothing obligatory on these points. The students who preferred it might live alone and in the crowd, as they do now; but the moral advantages of the social companionship I am speaking of, would be so evident, and it would be so easy to combine with them many valuable aids to study also, that a great majority of the fathers of families would not hesitate to prefer it for their sons.

Such was the institution I proposed to found, and the example I wished to supply of prolonging education in the higher departments, and of exercising a certain degree of moral influence over young minds in

their passage from the college to the world. Far from desiring to place such establishments under the control of the state alone, I was anxious, on the contrary, that a certain number should at the same time be instituted, different in origin and tendency, and perfectly independent. I explained this idea to a worthy Catholic divine and to a pious bishop, who entertained it favorably, and seemed disposed to support by their patronage a foundation of this character. I also conversed on the subject with several of my Protestant friends, who desired nothing better than to promote in concert, for the students of their own communion, the opening of such a center of regular and laborious life. Objections and difficulties beset the first steps of every sincere reformer, nevertheless there are many chances of success when the moving authority is not afraid of compromising itself, and accepts unhesitatingly the coöperation of liberty.

But what is most wanting to arduous enterprises, in the present day, is time; we can scarcely command a few hours of undisturbed or effectual activity. We live in the midst of tempests or dead calms, condemned alternately to shipwreck or inaction. More rapid and controlling than ourselves, events carry away our ideas and intentions before they have passed into facts, and not unfrequently before they have even ripened into attempts. I have perhaps less to complain of than others from this unremitting commotion of my own time, since, as minister of public instruction, I have been able to leave some enduring traces of my passage. Nevertheless, I can not banish certain feelings of regret when my thoughts revert to the projects I had formed, believing them to be salutary, and of which not even a glimpse was permitted to appear.

IV. ACADEMIES AND LITERARY ESTABLISHMENT.

I entered on the ministry of public instruction profoundly convinced that the time had arrived when it became an object of the first importance for the government of France, under whatever name it might be carried on, to show itself not only without fear, but an encouraging protector of all the labors of the human mind, including with every other field of exercise, that of the moral and political sciences. I can not imagine, in the present day, a more false or damaging position for power, than to be looked upon as a suspicious and systematic opponent of intellectual activity, even when, entirely divested of incidental views or party bias, that activity applies itself exclusively to the investigation of truth. I know the potent ties which connect abstract ideas with the positive interests of society, and how rapid is the transition from principles to facts, from theory to application. I am also aware that there are times and places in which truth, though general and purely scientific, may become perilous and embarrassing to established order. I abstain from discussing this difficult position; I think only of my own country and my own time. At the point of national life we have now reached, after the experiments we have tried, and the scenes we have witnessed, order and authority, far from having any thing to fear from the free, serious, and scientific development of human intelligence, should draw from it addi-

tional strength and support. Many and dangerous errors will still rise up; but in the elevated regions of intelligence and society, dangerous errors, moral or political, have ceased to sail before the wind; they are speedily recognized, opposed, and cried down. It is no longer with the higher but with the lower classes that theories calculated to promote disorder are favorably received and readily attain influence; it is not from the educated but from the ignorant world that they are to be apprehended or checked when they appear. In exalted life, the tendency of minds is to correct and purify themselves. It is in the obscurest stations, and emanating from inferior quarters, that malignant spirits now congregate and ferment, perpetually increasing in their perversity. Let the government learn to place confidence in intellectual progress above; it promises help, not danger. And let it be indefatigable in resisting intellectual disorder below: facts will too frequently supply the occasion and necessity. For if it be true that amongst the lower orders, at present, errors of the imagination are active and contagious, it is there also that they rapidly transform themselves into anarchial passions and destructive deeds, and fall under the just attacks of authority.

It was with these views and hopes thus limited, that a few days after the formation of the cabinet, I proposed to the King to reëstablish, in the institute, the class of moral and political sciences, founded in 1795 by the Convention, and suppressed in 1803 by Napoleon, at that time First Consul. Lately, at the highest point of the political and intellectual orgies of 1848, General Cavaignac, then at the head of the Republican government, called upon that academy to strengthen in the public mind, by the publication of little works profusely circulated, the fundamental principles of social order,—marriage, family ties, property, respect, and duty. With a good intent he essentially deceived himself as to the nature of the labors of such a community and the range of their action. It exceeds the province of science to repress anarchy, and to bring back the bewildered masses to reason and virtue. For such an undertaking, higher and more universal powers are wanting;—God and calamity. It is in regular times, by a just satisfaction given, and a wholesome direction imparted to elevated and enlightened minds, that learned associations can exercise a salutary influence for the advantage of intellectual order, and may lend to power itself, if it knows how to maintain mutual relations, an indirect but useful support. This was the result, neither more nor less, that I promised myself from the academy of moral and political sciences. The King and the cabinet eagerly adopted the proposition.

Nevertheless it encountered serious objections, and there were men of sound judgment who received it with little favor. In my own party, and amongst the firmest supporters of our policy, more than one had a strong mistrust of speculative philosophy, and doubted whether, with the wisest intentions, it could help to strengthen order and authority. Others saw with regret, men, notorious in the worst times of the revolution, restored to honor in behalf of science, and in despite of the unpleasant reminiscences

associated with their names. The first and inevitable consequence of the proposed measure, was, in fact, to call back, as the nucleus of the new academy, the twelve members still living of the old class of moral and political sciences. Two amongst them, the Abbé Siéyes and M. Merlin de Douai, had voted for the death of Louis XVI. A third, M. Garat, was minister of justice at that sanguinary period, and read the King's sentence to him. Nearly all belonged to the sensualistic school of the eighteenth century, and accorded ill with spiritual philosophy and the sentiment of religion. The return of such an influence produced uneasiness, and a feeling of sorrow that the government should appear to become its patron.

I encountered an unanswerable evidence of this feeling in a portion of the public. M. Royer-Collard, who was absent at the moment when the restored academy was preparing to complete itself by the election of new members, wrote to me thus: "If the public and the literary world take much interest in your academy of moral and political sciences, you have done well as regards yourself; but as it appears to me little better than an absurdity, a mere commonplace revival, raised, moreover, on conventional and revolutionary foundations, I have no desire whatever to figure there. I have written to this effect, and some days since, to Cousin. Remove therefore my name." In compliance with this wish, a name so naturally associated with the institution was at once withdrawn.

M. Royer-Collard was perfectly at liberty, in this circumstance, to consult his own personal tastes and dislikes; but in my position, I should have done very wrong had I acted under a similar impulse. In my public capacity I had two duties to discharge: the one, to reëstablish a scientific institution which I thought good; the other, to place this institution beyond the pale of political resentments and dissensions, even though they might be legitimate. I well know that philosophical ideas, very contrary to my own, prevailed in that class of the Institute, from its original foundation, and would reappear with its revival; but I had no fear, that within the inclosure I thus opened to them, these ideas could become powerful or formidable; and the objections of a few reminiscences of the revolution, were, in my judgment, very insignificant, in comparison with the present and future advantages of that brilliant demonstration, in the bosom of a free country, of the confidence of authority in the laborious and well-considered liberty of the human mind.

The measure being decided, I hesitated as little on the mode of execution as on the principle. I determined to make no academic appointment by royal decree. Election is the essence of all learned bodies, to which no one can be worthily admitted except by the choice of his peers. I remembered that an old and faithful royalist, the Abbé de Montesquieu, appointed in 1816 to the French Academy, by a royal decree which removed from that community several of its members, had always refused to take his seat there, saying, "I am no academician; academicians are not made by the King." I even withheld the decree of reëstablishment until I had concerted its arrangements with the surviving members of the

old class of moral and political sciences who were to resume their functions. I have as little taste for the forms as for the maxims of absolute power; I am easy and satisfied, as regards myself, in testifying toward all with whom I may be placed in intercourse, the respect due to intelligent and free beings. Setting aside my personal bias, power, in a majority of cases, derives much more advantage from accepting frankly the assistance of previous labor and deliberation, than from blindly provoking criticism by abrupt decision, according to its exclusive knowledge and fantasy. When it acts thus, it is more frequently from laziness and want of skill, than from necessity or prudence. Having determined to communicate to the old academicians the basis of my plan, I sought amongst them the one most likely to understand my views, and possessing the greatest degree of influence over his colleagues. Of all the survivors, the Abbé Siéyes had the greatest reputation. I went to visit him accordingly. I had some difficulty in being admitted, and found him in extreme prostration of mind and memory. For a moment, during our short interview, the name of the class of moral and political sciences appeared to revive within him a flash of interest—an unsteady glimmer which rapidly disappeared. I at once gave up the idea of all intervention on his part in the negotiation I meditated. Looking over the other names, Count Rœderer appeared the most eligible for my purpose. He was a man of open disposition, flexible, judicious, liberal, learned, and despite the prepossession of many prejudices belonging to his time, exempt from passion and party obstinacy in practical matters. He was at his country residence at Matignan, and at my urgent request came immediately to Paris. I communicated to him my plan, and my views for its execution; requesting him at the same time to call his old associates together, and discuss the matter with them. He undertook the office with ardor, and on the 24th of October, I received from him the following letter:—

"Sir:—I have read to the old members of the class of moral sciences of the Institute, the letter which you have done me the honor to address to me this morning.

"They highly approve the reëstablishment of this class.

"They think, that without dividing it into sections, it would be better to combine in a general article the duties of the sections, and to add to them the *philosophy of history* (or the methods to be adopted in historical compositions, so as to render them, as far as possible, advantageous to morality and policy.)

"They conceive that this class should be limited to thirty members, and receive the title of *Academy of Moral and Political Sciences.*

"They consider as a consequence of the restoration of this class, the restoration of all the still surviving members, and, in addition, that of two members who were only associates at the time of the dissolution, but who have since received the electoral character in one of the existing classes.

"They think it desirable to add four members to elect the fifteen others

who are to make up the complement of the academy; but they are also of opinion that this addition should be made by means of *regular election*, and that no election can be considered regular until after the issuing of the decree for reëstablishing.

"They think that the election ought to take place at three periods. The first, immediately after the publication of the decree: this will name the four new assistants.

"At the second election, the fifteen members, formed by the addition of the above-named assistants to the eleven old members, will name eight more, amounting in all to twenty-three.

"At the third election, the twenty-three members, will name the seven who are to complete the full number of the class.

"Such, sir, is the result of our long deliberation, during which all present expressed the most favorable sentiments toward the proposed plan."

Every thing in this letter was in perfect accordance with the ideas I had communicated to M. Rœderer, and the decree followed immediately. But when we came to its execution, and first of all to the election, by the old members, of the four assistants, who, in concert with them, were to complete the academy, many rivalries, susceptibilities, and philosophical suspicions began to appear. The four assistants were to be taken from the other classes of the Institute, and amongst the names placed foremost for choice, there appeared, very naturally, that of M. Cousin. M. Daunou rejected it; not, as he said, that he desired absolutely to exclude M. Cousin from the academy; he considered it proper and even necessary that he should become a member; but he asked that he should be elected at a later period, and on the final completion of the class. Being pressed by objections and interrogatories, he replied that he did not wish, by electing M. Cousin amongst the four first assistants, to give him an influence in the following elections, which he might abuse "for the advantage of his own doctrinal party against ours." As the discussion continued, M. Daunou ended by saying that he had no objection to the government taking upon itself the appointment of the four assistants, in the decree for the restoration of the academy, and to the inclusion of M. Cousin in the number; "in such a course there would be no deviation from the examples of the past, and nothing could be said against it." M. Merlin accorded with this opinion. These academicians thus renounced their exclusive right to elect colleagues, and provoked the government to an act of its own will to save themselves the embarrassment of rejecting, or the arrogance of admitting a candidate whose philosophical doctrines disturbed their own. I declared that I would never propose to the King to name the academicians himself, and that the old members of the reëstablished class were perfectly free to elect the four first assistants according to their pleasure. The election took place accordingly. I do not know how M. Daunou voted, but M. Cousin was amongst the chosen four. The fifteen thus combined, completed the full number by two successive elections, adding respectively eight and seven new members; and

on the 4th of January, 1833, M. Rœderer opened the session of the academy thus definitely constituted, by a speech replete with joyful satisfaction, and hopes a little inflated on the score of philosophy;—a persevering characteristic of the brilliant and stirring generation to which he belonged.

Two years later I met with a remarkable instance of the confident and energetic activity of these surviving relics of 1789, in the simplest as in the most important circumstances of life. I happened one morning, in company with others, to be at the house of M. de Talleyrand, who had come on leave from London to Paris. "Gentlemen," he said to us, with a smile of satisfaction almost youthful, which I have more than once seen on his cold features, "I must mention to you what happened to me yesterday. I went to the Chamber of Peers; when I entered the hall we only counted six who had arrived—M. de Montlosier, the Duke de Castries, M. Rœderer, Count Lemercier (I forget who he named as the fifth), and myself. We had all sat in the Constituent Assembly, and were all more than eighty years of age." These staunch old men were delighted to see and remark that they were still first at their post.

Another ancient, a wreck of an assembly no less celebrated, and who probably thought himself equally renowned by the great scenes and terrible consummation in which he had participated, M. Lakanal, a member of the National Convention, and one of those who voted for the death of Louis XVI., had also been a member of the old class of moral and political sciences. It was he who, in 1795, had proposed and carried in the convention, the fundamental regulation of the Institute, and the list of original members. In 1832, when the reëstablishment of the academy to which he had belonged came under consideration, no one, not even amongst his former colleagues, either thought of or inquired as to what had become of him. He was believed to be dead, and was entirely forgotten. Nevertheless he still survived, and had become a settler in one of the recently incorporated states of America, Alabama—at that time the extreme limit between civilization and savage life. There he heard of the revival of his academy, and of the reënrolment of his old associates. He wrote to me, demanding his privilege of resuming place amongst them. This indisputable claim was transmitted to the whole body. The death of M. Garat at that precise moment left a vacancy open in the department of morals. M. Lakanal succeeded to it by right and without election. As soon as I communicated this to him, he hesitated on returning to France, and in reply, offered his services in the United States. His letter was a singular mixture of just and confused ideas, of experimental prudence and fidelity to his revolutionary remembrances.* I declined his offer; M. Lakanal then returned to France, resumed his seat in the academy, and died in 1845, still obscure, but with all the accompanying honors to which his position entitled him.

In active exercise for twenty-seven years, the Academy of Moral and

* See "*Historic Documents*," No. VIII.

Political Sciences has fully demonstrated itself and justified its foundation. It has never been governed by the spirit of political party or philosophic intolerance. Some symptoms have occasionally appeared there as the natural consequences of liberty, but they have always been counterbalanced and restrained. Such a result arises from the continual intercourse of men differing in position and opinions, but united in a common predilection and respect for science and truth. In its dealings, whether with the public or the government, the academy has invariably given proofs of independence and moderation. On all occasions it has strenuously opposed disorder, and boldly seconded the regular progress of mind. The published reports of their sittings and the collection of their papers attest the intellectual activity of the members. By the emulation it has excited and the questions proposed, it has given rise, beyond its own immediate sphere of action, to many important and some very remarkable labors in philosophy, history, legislation, political economy, and all the beautiful and difficult sciences to which it is devoted. Men of merit, previously unknown, laborious and distinguished youths, have been brought into notice and placed on the track of elevated study and substantial success. Nothing can be more ill-timed and unintelligent in the present day than opposition to academies. We live under a state of society more equally balanced and more careful of the general good than has hitherto prevailed in the greater part of human associations; but we are deficient in varied centers, enduring groups, strongly cemented aggregations, and independent impulses. We have a society at once dissolved and concentrated, which exhibits everywhere the insulated individual in face of the all-powerful unity of the State. We have long sought, and hitherto without success, some remedy in political order for these deficiencies in a social condition, which, in conjunction with great public advantages, leaves weakly-established rights, ill-secured liberties, and individual existences equally languishing and unsettled. Academies offer, in the present day, and for the influence of intellectual order, the natural and almost the only remedy for this weighty defect in our general society. They assemble under a pacific flag, without imposing any yoke or factitious unity, illustrious men, who without this link would continue strangers to each other; and by mutual association they all obtain, with the enjoyments of liberal intercourse, means of influence and securities for independence. In the outer world they draw cultivated minds to studies and questions in which they can exercise and satisfy themselves without running into extremes; they restrain them within certain limits of reason and convenience, while exciting their activity and supporting their freedom.

Prepossessed with these ideas, I endeavored to apply them beyond the confines of Paris, and to obtain the coöperation of the learned societies in the provinces, for the sound regulation and progress of intellectual order. The number of these communities, the strong attachment borne to them by the greater portion of their members, the favor in which they are generally held in the elective councils of their departments and towns, prove

that they are imbued with animated sentiments which seek only the opportunity of development. But the leading element of success is too often wanting in these liberal associations—public sympathy and notoriety. Many of them languish for want of full light, and their most zealous members feel discouraged by being alternately deprived of the means of study they require, and of their just proportion of credit after labors accomplished. Some generous spirits—amongst others, a learned French archæologist, and one of the most active correspondents of the Academy of Inscriptions and Polite Literature, M. de Caumont—endeavored, either by scientific congresses or by the formation of local societies, fictitiously united under the name of Provincial Institutes, a general although scattered community, to impart to all these bodies the motion and productive publicity in which they were deficient. I am unable to estimate correctly what was, or to predict what might have been, the success of these efforts; but, be that as it may, it was my opinion, in 1834, that the central power was called upon to lend its hand to the work; and after having obtained precise information on the scientific associations of France, I addressed a circular letter to all, inviting them to establish, between the minister of public instruction and themselves a regular correspondence. "The societies," I said, "will make me acquainted with the particular nature of their present labors, and those they wish to undertake; with the resources they stand in need of in every class, whether books, instruments, or scientific information. I shall endeavor to supply them with all that they require to assist their free exertions, and shall cause to be published every year, under the auspices of the government, at first, a collection of some of the most important papers read in the principal literary communities of the kingdom, and subsequently a condensed general report of their labors, drawn up from their own individual statements or from the accounts transmitted to me; thus perpetuating a correct monument of the intellectual activity of the country—at least, as far as it manifests itself through the organ of scientific associations."

To convince these societies that in addressing them I was not actuated by mere administrative curiosity, and that I attached a solid importance to my proposition, I added, to motives drawn from their own interest, another of general and superior importance. "At the moment," I said, "when popular instruction expands in every quarter, and when the effects of which it is the object ought to excite a great and animated movement amongst the numerous classes devoted to manual labor, it is most essential that the classes in more easy circumstances, who employ themselves in intellectual occupations, should not subside into indifference or apathy. In proportion as elementary instruction becomes general and active, it is indispensable that in the superior branches of study the labors of exalted science should advance in a similar ratio. If the progress of intelligence went on increasing with the masses, whilst sloth prevailed amongst the higher orders of society, sooner or later a dangerous perturbation would ensue. I consider it, therefore, a duty imposed on the government, for the interest of society at large, to impart, as far as

in it lies, a powerful impulse to elevated study and pure science, as much as to practical and popular instruction." Finally, to dissipate beforehand, in the literary associations of the departments, the mistrust I anticipated, I concluded thus:—"There is no question here of any centralization of business or power. I have no intention of infringing on the liberty or individuality of the learned societies, or of imposing on them any general organization or ruling idea. The matter at issue is simply to transmit to them, from a common center, the means of successful exertion which they could derive from no other quarter, and for them to return to the same source the fruits of their activity to be disseminated in a more extensive sphere. Far from abstracting any portion of their local independence or importance from the learned societies, this measure is calculated, on the contrary, to secure and augment both, by giving increased efficacy and scope to their efforts."

This circular, despatched to seventy-five learned associations scattered over the kingdom, excited a certain degree of stir and expectation. Several of them commenced an animated correspondence with my department. I forwarded to them books, national and foreign documents, scientific information, and small sums of money to assist them in their researches and local publications. One of my successors in the ministry of public instruction, M. de Salvandy, resumed in 1837 and in 1846, with the generous ardor he threw into all his undertakings, the work thus commenced; he asked and obtained from the Chambers a special section in his budget, devoted to the learned associations, and endowed with fifty thousand francs. This sum he divided amongst sixty of the number—a mode of support I am far from considering as generally futile, but which in this particular case I can not look upon as the most necessary or efficacious. Encouragement ought to be bestowed on the persons and their works: intellectual consideration rather than pecuniary aid is of leading importance to learned bodies. What they preëminently desire is to find themselves recognized and appreciated in the literary world. I proposed to employ, in my department, one or two distinguished men in an assiduous systematic correspondence with these societies, and to prepare, in concert with them, the publications of which they were to be the object. This kind of encouragement, I venture to think, would have been more agreeable and serviceable to them than a small share of a limited allocation.

I should say nothing in respect to some measures of little importance which I introduced in the various scientific and literary establishments, libraries, museums, and collections dependent on my ministry, if my ideas on these points had not been, and did not still continue materially different from those which obtain credit in the present day. I am therefore anxious to state with precision what my intentions and conduct were toward these several communities.

I am a steady partizan of monarchy and administrative government. France owes to both much of her prosperity and progress. I feel sincerely grateful to the Emperor Napoleon I., for having said to M. de Fontanes, "Leave us at least the republic of letters;" and I adopt these

words more seriously than perhaps Napoleon himself meant when he uttered them. The system of administrative monarchy, its intractable unity, its monotonous bearing from head to foot, its frigid prepossession for things rather than persons, its severity against disorder, and its want of sympathy with liberty—all these characteristics are unsuited to the region in which the literary and scientific character holds rule. Such establishments require a large share of independence and spontaneous action, of variety and personal government. Not to gratify vain or fantastic whims, but from the very nature of the men with whom we treat, and the matters specially treated of in such cases. General and superior administration requires rules and agents; above all things, it fears and rejects individual caprices, unforeseen acts, anomalies, and abuses. It is ill suited to the management of scholars and philosophers, men accustomed and disposed to invent, to criticise, to determine their own ideas and labors, and with whom it is necessary to converse and argue incessantly, instead of simply sending them a copy of instructions or a formal circular. Shall government place over them an agent analogous to itself, a petty administrative sovereign? In that case, the scholars and philosophers thus controlled, take offense, the government incurs their secret opposition and ill-humor; they resign, and nullify themselves, leaving the affairs of letters and science to be transacted by mere strangers to their necessities, their tastes, their desires, their pleasures, their studies, and their books; who may perhaps introduce order into literary establishments, while they utterly destroy their vitality. Then follows a general feeling of astonishment that letters languish and scholars become disaffected!

Let me cite an example of the errors into which authority falls, and the mischief it does, when it applies ideas purely administrative to literary and scientific establishments. In doing this, I shall select one of the instances most favorable to government, a case in which plausible motives appear to justify the measures adopted. For a long time, and under the parliamentary system, as at present, the apartments assigned in the scientific establishments to the keepers, professors, and different officers who exercise their functions on the spot, have been condemned as abuses. Their dwelling-houses have been alternately pronounced too numerous, too spacious, or too magnificent. I have already inserted the stinging answer of an illustrious scholar to these repeated complaints. To put an end to abuse, this practice has recently been abolished in the Imperial Library; it has been decided that no keeper or officer should any longer live within the walls, and an indemnity has been granted to those who were in consequence expelled. This was intended and believed to be an act of judicious legislation; but it evinces a profound misunderstanding of the nature and moral power of scientific establishments, whilst it strikes a heavy blow against scholastic life and habits. A public library, a museum of natural history, the conservatories of great collections, are in the eyes of the men intrusted with their charge, with the care of enriching them, and of giving lectures on their contents, very different

places from the mere buildings in which they perform their duties. They become the home of their souls; a country in which they live surrounded by the instruments of their labor and the pleasures of their thought. I might call them laical convents devoted to science, in which men freely enclose themselves, to whom science is their all in all, constituting alike their employment and recreation. They do much more than receive the public there, and reply to their questions; they themselves work the mine of wealth they watch over; the libraries and museums in which they live are their personal laboratories. It is by means of this continued cohabitation, this material intimacy, if I may so express myself, with the monuments and repositories of science, that the chief portion of the great works emanating from thence have been prepared and completed by the resident officers of the scientific establishments. Is it to be expected that the same sentiments will develop themselves, the same ties be preserved, and the same results obtained, when these establishments become deserted buildings, except on certain days, and at particular hours, when the keepers and professors repair thither with the public to discharge a task, and retire as soon as it is concluded, to seek within their own homes those studious and domestic enjoyments no longer associated in their minds with the halls and buildings in which they have ceased to reside? The city and the family of literature have been broken up. Scattered functionaries, even though they were the most learned and punctilious in the world, can never replace them.

We are too often inclined to suffer ourselves to be exclusively prepossessed with certain faults and evils which strike the mind and ruffle the temper, and to forget or sacrifice in the desire for their abolition the valuable advantages with which they are combined. I am no advocate for abuses; but I would rather nourish two or three parasitical plants around the tree than weaken or cut down the tree itself. I believe, moreover, that by a few persevering measures of inspection and publicity, it would be easy to anticipate or reform the greater part of the complaints raised against the administration of scientific establishments, without depriving them of their essential character. Be this as it may, when, in November, 1832, I was called upon by the demands and committees of the Chambers themselves, to apply certain modifications to the system of the Royal Library, I took the greatest care that they should in no way affect the ancient independence, or what I may call the literary autonomy of that establishment. I left the interior government to the assembly of its conservators; I merely imposed on them the obligation of recommending, of their own accord, and chosen from amongst themselves, by the presentation of three candidates, a president of the conservatory, who would act, within, as the executive power, and would constitute, without, their representative with the general administration. I thus introduced into the establishment a principle of unity and responsibility, without interfering with the dignity of its learned heads, or depriving them of their natural privileges. I even strengthened the position of the superior and inferior officers of the library, by giving them, through their own nomin-

ation and advancement, important securities against the spontaneous and arbitrary action of the central power.

The government of the Museum of Natural History might have been susceptible of some analogous reforms; but they were less loudly called for by the public, and the heads of the establishment, all professors of reputation, appeared to look upon them with greater dread. I therefore left untouched their old organization, under which science and teaching had made satisfactory progress, and to which it had imparted so much brilliancy.

I effected for these two societies a measure of more importance to the prosperity of literature and science, than the suppression of a few houses, and a trifling number of administrative irregularities, by asking and obtaining from the Chambers a considerable increase to their dotation. From 1833 to 1837, the ordinary budget of the Museum of Natural History was carried from 337,000 to 434,000 francs; and that of the Royal Library, from 205,000 to 274,000; an augmentation of one-third, principally applied to placing in good order and enriching the material of both establishments. In virtue of the law for extraordinary public works, proposed by M. Thiers on the 29th of April, 1833, and promulgated on the 27th of June following, a sum of 2,400,000 francs was appropriated to the extension of the grounds belonging to the Museum of Natural History, and to the erection of a mineralogical gallery and numerous greenhouses, long desired to assist the labors of the professors, and to gratify the curiosity of the public. King Louis-Philippe laid the first stone of the mineralogical gallery on the 29th of July, 1833, on the occasion of which ceremony I accompanied him. The crowd was enormous, including all the learned members of the Museum, the habitual visitors, the students, and the national guard of the quarter. In the name of that public, I thanked the King for the additional means he thus placed at the disposal of science, of employing its riches to their full advantage. "It is your destiny, sire," I said to him, "as it will also be your glory, in trifling as in great affairs, to accomplish what has been projected, to terminate what has been begun, to reach the end universally desired, to satisfy the moderate necessities of science, as well as the all-powerful interests of society." In these words I expressed the sentiments of all who then listened to them. The sincerest hopes are presumptuous; but men would feel their hearts freeze within them, and would sink into apathy, could they but divine the uncertainty of their works, and if the future ceased to be concealed from their view.

V. HISTORICAL STUDIES.

Our tastes easily become manias, and an idea which has long and powerfully possessed us, assumes an importance in our estimation to which vanity often lends too much faith. Nevertheless, the more I reflect, the more I feel convinced that I have not exaggerated to myself the interest which a nation ought to take in its own history; nor the advantage it gains in political intelligence as well as in moral dignity, by

completely understanding and attaching itself to this subject. In the long course of successive generations, denominated a people, how rapidly each passes away? And in that short passage how narrowly is the horizon bounded! How insignificant is the place we occupy, and how little do we see with our own eyes! We require to magnify our thoughts, that we may be able to take a serious view of life. Religion opens the future and places us in presence of eternity. History brings back the past and adds to our own existence the lives of our fathers. When we turn to them, our perceptions rise and extend. When we thoroughly know them, we acquire a better knowledge and comprehension of ourselves. Our own destiny, our present situation, the circumstances which surround and the necessities which press upon us, become more clear and natural in our eyes. We not only gratify science and imagination, by thus associating ourselves with the events and persons that have preceded us on the same soil and under the same heaven, but we take from the ideas and passions of the day much of their narrow sourness. Amongst a people interested and well instructed in their own history, we are almost sure of finding a more wholesome and equitable judgment on their present affairs, the conditions of their progress, and their chances for the future.

The same idea and hope by which I had been governed and animated in my course of lectures at the Sorbonne, on the development of French civilization, followed me to the ministry of Public Instruction, and regulated my efforts to revive and expand the taste for, and study of our national history. From this source, assuredly, I looked for no rapid or widely-spreading effect, either as to the abatement of political passions or the correction of popular prejudices. I knew too well already how deeply they are rooted, and that powerful and repeated blows from the hand of God himself are necessary to extirpate them. But I expected that in Paris, in the first instance, in the center of studies and ideas, and subsequently in various parts of France, a certain number of intelligent spirits would acquire more correct and impartial notions of the different elements of what French society is composed, of their mutual relations and rights, and of the value of their historical traditions in the new social combinations of our own days. I was not disheartened by the inevitable slowness of this intellectual progress, nor by the still more tardy effect of its public influence. There is pride in the pretension of reforming the errors of our time; those who indulge in it must be content with even a glimpse of success. They preach patience to nations in the pursuit of their desires; let them learn to practice patience themselves in their own labors and hopes.

Before 1830, I had obtained, not only with the public and by my lectures, but in the general system of public instruction, some important results in respect to the study of history. This study was not even named in the law which, under the Consulate, in 1802, had reëstablished secondary education. "In the lyceums will be taught," says the tenth article, "the classical languages, rhetoric, logic, moral philosophy, and

the elements of mathematical and physical science." A step was made in the statute, by which the council of the university, in 1814, regulated the discipline and course of study in the colleges; instruction in history and geography was then introduced, but in a very accessory form. The professors of the old languages were ordered to undertake these branches in addition to their literary teaching. During the summer months, from the 1st of April to the vacations, half an hour was added to the evening classes; "and this half-hour," says Article 129, "will be exclusively devoted to geography and history." It was not until 1818 that a decisive and effectual measure came into operation. M. Royer-Collard and M. Cuvier, with whom I had often considered the subject, carried a resolution to the following effect:—

"Seeing the present arrangement in the colleges, which assigns to the professors during the summer months an additional half-hour at the termination of every evening class, for giving instruction in history and geography;

"And considering that the intent of this regulation has not been generally carried out to the present time, and also that it is desirable to give to this department of classical study the full development required by the state of society and the wishes of families;

"*It is decreed as follows:*—

"Instructions in history and geography in such royal and departmental colleges as will be pointed out by the committee will henceforward be intrusted to a professor or substitute specially appointed."

The result responded to the expectation. Special professors of history were named, with suitable appointments; instruction in the different historical epochs was distributed through the successive classes; history and geography assumed their due share in the honors of general competition and their place in the schools of the state.

A little later, in 1820, the committee of public instruction, when communicating to the professors the new plan of teaching, determined very judiciously its scope and character. "The professor," it said, "will form an erroneous idea of the advantages expected from his zeal, if he believes himself called upon to enter into the development and discussion of high criticism which belong to more exalted instruction. This is not to be considered a faculty class. The professor can only expect to become useful to his pupils by measuring their standard. The class must be formed for them, and not for himself. His object being to impress on their memories the leading facts of history, the knowledge of which is laboriously and imperfectly acquired at a more advanced age, he must not seek other sources of interest than the simple exposition of historical events, and the natural connection subsisting between them. Above all, he must avoid every allusion that might lead his pupils into the field of politics, and supply food for party discussion."

Notwithstanding this reserve, when influence, in the first place, and power afterwards, passed into the hands of M. de Villèle, or rather of his party, historical teaching became suspected; and in the measures of the

day—particularly in the new statute drawn up in September, 1821, for the government of the colleges—a concealed effort was perceptible, if not to abolish this department altogether, at least to reduce and cast it into the shade.

But the effort was visibly embarrassed and timid. At that epoch it was the fault and misfortune of the parties in conflict, whether friends or enemies of the Restoration, to fear each other too much, and mutually to overrate their power. Their reciprocal apprehensions far exceeded their actual dangers, and they threatened more than they struck. In spite of the proclaimed suspicions and hostile acts of what was called the Association against the University and its progress, when the Restoration fell, not only did the university remain unshaken, but in its bosom, and in the different gradations of public instruction, in the colleges as in the faculties, historical teaching was established.

The system of 1830 banished all uneasiness as to the security of this teaching in the colleges, but injured it in the higher departments. Several of its ablest exponents dedicated themselves entirely to political life, and historical labors soon suffered from the effects of the disorganization of minds. M. Augustine Thierry, at that time ill and almost blind, and living near his brother Amédée, then prefect of the Upper Saône, wrote thus to me from Luxeuil on the 3d of September, 1833:—"Do you believe, my dear friend, that my presence in Paris would be of any service to historical studies? Our school is dissolved by your general pension; nothing remains of it but a few fragments, which are disappearing from day to day. I could collect them together and make myself a center; and, in truth, the matter is pressing. See what light and unsteady teaching has already become popular. What is published in books is even more extraordinary. Under the name of history people compose dithyrambics and poetry. You have established a conservator of historical monuments. Create also a preserver of style and method in history; without which, before four years have expired, no trace will remain of what has cost us all, and you in particular, so much anxiety and labor. I will devote to this work the remnant of my life. Place me in a position to live in Paris; let your justice decide on the rights I have acquired by what I have done and lost for science, and Providence will accomplish the rest."

I was more impatient than any one else to open new sources of wholesome strength and prosperity to the studies to which I was so warmly attached, and which I saw seriously endangered. Public feeling came to my assistance. If superior instruction in history had suffered a considerable check, the taste for historical researches and reflections was evidently extending, and afforded intellectual gratification, with the chance of literary fame, local or general, to many active minds who were neither attracted nor encouraged by political life. Several of my friends communicated to me their project for founding, under the title of *Society of the History of France*, an association specially devoted to the publication of original documents relative to our national history, and with a view to

disseminate, either by correspondence regularly carried on, or by a monthly *Bulletin*, a general knowledge of the scattered and neglected labors of which it was the object. I hastened to give this plan my assent and coöperation. We met together on the 27th of June, 1833, to the number of twenty institutors; we arranged the bases of the association, and a little more than six months later, on the 28d of January, 1834, the *Society of the History of France*, reckoning already one hundred members, formed itself into a general assembly, adopted definitive regulations, appointed a council to superintend its labors, and took the field in full activity. What it has since accomplished during twenty-five years is well known. It has printed seventy-one volumes of memoirs and unpublished documents, nearly all of the highest interest to our history, and some containing authentic discoveries, equally curious and important for the amateur and the professional scholar. It has expended on these publications 360,000 francs, (£14,440.) It has excited throughout the country, and in a multitude of small towns entirely without scientific establishments, an inquisitive investigation of their own local annals, with all their reminiscences and documents. At present it enumerates 452 members; and this number continually increasing, the importance of its publications, the extent of its correspondence, and the regularity and interest of its monthly *Bulletin*, all tend to secure a long and productive future.

But even at the moment of its establishment, and from my interviews with its most zealous founders, I felt convinced that it would fall far short of its imposed task, and that the government alone possessed the literary and financial resources indispensable to such a work. I resolved to undertake it, as minister of public instruction, and to give it, from the beginning, the extent and brilliancy which would alone incline the Chambers to the large contributions I should be compelled to ask from them. In intellectual as in political arrangements, it is by great expectations and demands that human sympathy and activity are stirred up to energetic efforts. I had several ends to attain. I wished to seek out, collect together, and place in security, throughout all France, the monuments of our history which had not perished in the revolutionary spoliations and destructions. I was anxious to select, in the local archives thus restored, and in those of the state, whether diplomatic or military, every important document of national history, and to publish them in succession, without wounding any public interest or convenience, and also without puerile timidity. To execute such a labor worthily, required the association of men eminent in historical study, to decide, either in committee with the minister of public instruction, on the importance and merit of the documents, or individually to superintend their publication. It was also essential, that throughout the entire country, the local scholars and archæologists should enter into correspondence with the minister and his council, to point out to them the concealed treasures, and to assist in their exhumation. Under these conditions alone could the work respond to the idea, and produce a collection of hitherto unpub-

lished documents calculated to throw living light, not on a single period or province, but on the entire series of ages and multiplied theaters of the long and energetic life of France.

In the financial budget presented to the Chamber of Deputies on the 10th of January, 1834, I demanded a special allocation of 120,000 francs, to commence this undertaking. Opposition was raised against such a novel and *heavy* expenditure. The committee specially charged with the examination of the budget of my department proposed to reduce it to 50,000 francs. The general committee of the budget called upon the Chamber to reject it altogether. I supported my proposal. The debate was animated and embroiled. I found supporters amongst my adversaries, and adversaries amongst my friends. M. Garnier-Pagès accused me of endeavoring to draw away from the journals, the young writers who maintained *principles*, to attract and engage them in studies unconnected with politics. In reply, M. Mauguin congratulated himself and me on the publicity I proposed to give to political archives and correspondence; an excellent school, he said, in which to form the politicians of whom France stood in need, and added: "When you have only created a few of these, you will be indemnified a hundred-fold for your expenses." M. de Sade and M. Pagès de l'Ariège, M. Pelet de la Lozère, and M. Gillon, adduced more serious arguments for and against my demand; the passion of economy and the love of science were mutually opposed. The Chamber placed confidence in me on such questions as these, and received with favor measures of a liberal character not interfering with the policy of order and resistance. I gained my cause. As soon as the budget was voted, I presented a report to the King, in which I explained, in detail, the motives and hopes, the plan and executive means of the undertaking. On returning it, he wrote as follows:—"My dear minister; I have read with much interest the report you have transmitted to me this morning. You will find it inclosed and confirmed by my approbation. You have undertaken a great and useful work. The thought was worthy of you, and its execution could not be intrusted to hands more capable of assuring success. I find in this a new reason for being thankful that I have such a minister." Thus supported by the great public authorities, I immediately applied myself to the task.

The good-will and effective activity with which I was met by all the friends of historical study, soon became certain guarantees of a happy result. Messrs. Augustin Thierry, Mignet, Fauriel, Guérard, Cousin, Auguste Le Prévost, and General Pelet, anxiously hastened, not only to associate themselves with the labors of the central committee instituted in my ministry, but to superintend themselves the first important publications destined to inaugurate the collection. The number and zeal of our distinguished correspondents in the provinces rapidly increased. Eighty-nine were enrolled by December, 1834, when I sent them my report to the King, and general instructions as to the labors in prospect. Five months later, in May, 1835, either by voluntary offers or new nominations, the number reached one hundred and fifty-three. It thus be-

came evident that a national and scientific sentiment was excited and satisfied.

I find amongst the papers I have preserved connected with that epoch, two names which I can not read without an impression of sad and affectionate regret: a report from M. Michelet, on the libraries and archives of the south-west of France, which I had commissioned him to visit, and a letter from M. Edgar Quinet, who offered me his assistance in the search for and publication of inedited documents. With both, I had entered into important and friendly communications. M. Quinet's translation of the great work of Herder, on the history of humanity, and the remarkable *Introduction* with which he accompanied it, had inspired me with a lively interest for him. By my own selection, M. Michelet officiated for a time as substitute in my chair at the Sorbonne, and upon my recommendation was called to the Tuileries to give lessons in history, at first to her Royal Highness, Mademoiselle, now Duchess of Parma, and subsequently to the young princesses, daughters of King Louis-Philippe. The report, which I find from him, dated in 1835, is simple and clear, a purely archæological journey without pretension or fantasy. M. Quinet's letter, written on the 18th of May, 1834, runs thus: "If you thought that the publication of some epic fragments of the twelfth and thirteenth centuries might, with propriety, be comprised in your collection, I would most readily apply myself to this work. I should be equally at your disposal if it entered into your plan to explore the libraries of Germany, Italy, and Spain, and this occupation I should prefer above all others. In any case, I should be happy to receive your instructions on the subjects which constitute my daily studies, and to be enabled thus to profit more directly from your information." Here are two more rare and generous spirits, afterwards seduced and attracted by the evil genius of their time into its impure chaos, and who outweigh, in personal value, their ideas and success.

I have nothing to say in regard to the collection itself thus commenced under my supervisorship. In the midst of the troubles of the day and in spite of the fall of kings, republics, and ministers, this work has advanced and developed itself, as rapidly as could have been looked for in tranquil times. The collection at present reaches 114 volumes, and amongst them are included several of the most important, and until then the least-known monuments of the past history of France. Experienced masters, and their most eminent disciples in historical study, continue to bestow their care on these publications. The ministry of public instruction has, at present, three hundred correspondents in the departments, collected round this center of national research. Nothing is wanting to enable the public to appreciate fully the work, its original idea, and progressive execution. Let me be permitted to record a single fact which touches myself. When, in the month of February, 1836, the Cabinet of the 11th of October, 1832, was dissolved, and I quitted the ministry of public instruction, my successor in that department, Count Pelet de la Lozère, ordered a report to be delivered to him of the historical labors accom-

plished, commenced, or ordered, in compliance with my instructions. This report, dated the 23d of March, 1836, records minutely the impulse given and the progress already imparted, to the path I had opened. I venture to insert it amongst the "Historic Documents" appended to these "Memoirs."

I have mentioned the political expectation, real and animated, though distant, which, in my opinion, from the first moment, united itself with the scientific value of these labors. This hope has never abandoned me. Even in the present day, so near the period of our social convulsions as yet imperfectly restrained, if an impartial and enlightened observer were to traverse France, he would find in every quarter, in all our towns, great or small, and even in the remote country districts, unpretending, well-instructed, and hard-working men, devoted with a feeling of enthusiasm to the study of the general or local history of their country. If he entered into conversation with them, he would be struck by the justness of their sentiments and the freedom of their minds on the old as well as on the new state of French society; and he would find it difficult to believe that so many sound ideas, expanded over the entire land, can always remain without influence on the dispositions and destinies of the people.

V. SAMUEL GRIDLEY HOWE.

SAMUEL GRIDLEY HOWE, whose name will forever be associated with the establishment of the first Institution for the Blind, as well as with the organization of the first School for the Idiotic, on this continent, and with improvements in the methods and instruments of teaching the children of these unfortunate classes, which have been introduced into similar institutions wherever they exist, was born in Boston, on the 10th of November, 1801. After pursuing his preparatory course in the Public Latin School, he entered Brown University, where he graduated in 1821. During his college residence he made the acquaintance of Horace Mann, which afterwards ripened into the closest intimacy—each sustaining the other in his own chosen field of philanthropic labor, and both sympathizing in every effort wherever and by whomsoever put forth to lift from society the burden of any ancient wrong, or to introduce light and amelioration to any class, no matter how long or how much neglected. As Mr. Mann, in a Discourse prepared in 1857, to illustrate the ways in which young men may "do the will" of our "Father who is in heaven," has left behind him his estimate of the labors and character of Dr. Howe, as a conspicuous example of a benevolent life, we feel that we can not, in making up our record of the promoters and benefactors of American education, do better than to transfer his brief, but appreciative sketch to our pages. Of his preparation for the work from personal knowledge of the subject, Mr. Mann remarks:—"I have known him long. Perhaps few have known him as intimately. We were in college together, and for twenty years I was officially associated with him in the administration of that Institution with which his name is now imperishably connected. For a great deal of that time, there was scarcely a day in which a personal interview did not give me some new proof of his wisdom and goodness.

"At the time when the Greek war of Independence broke out, Dr. Howe was a student of medicine in Boston. Even then, his youthful heart was an altar already loaded with incense. The sight of a brave people struggling for liberty, kindled that incense into a flame;

a flame which has burned uninterruptedly, for Greece, for Poland, for Hungary, for Italy, and for those in this country who are under direr oppression than Greek, or Pole, or Hungarian, or Italian. In 1824 he flew to Greece, and for six years, a part of the time as a surgeon in the army, or on board the fleet, a part of the time as a volunteer, like Lafayette and Kosciusko, in our Revolutionary war, he devoted himself to the liberation of that people. He adhered to their cause until he left them free. Then he taught them something of the arts of peace. The first cart made in Greece was made under his superintendence. The old ancestors of that people had made chariots for battle, but not carts for agriculture, and their descendants inherit a sufficient degree of the old organization to shape a graceful boat with a jack-knife, while so little were the useful arts cultivated, that they needed instruction in fabricating the most common utensils of life. The Egyptians had overrun the Peloponnesus, ravaging and destroying all fruit and harvest, and the people were reduced almost to starvation. At that critical moment, (1827,) Dr. Howe returned to this country, preached a crusade through all New England and New York, raised some sixty thousand dollars in money, and an immense quantity of clothing, with which he relieved the mortal necessities of the Greeks, and sustained them until the final hour of triumph. Twenty years after, when he rode alone into Greece on horseback, one day, an accidental traveling companion was astonished to see him recognized by a peasant woman, who spread the glad intelligence, and he was immediately surrounded and borne into the neighboring city, *nolens volens*, on the shoulders of the people. Such joy was manifested at the sight of him who had founded a village on that spot in the days of stormy trial, that his accidental companion was moved to tears at the spectacle of the enthusiasm, even before he knew the details of the history. At that point of time, the Greeks were just again triumphant over oppression, and his friends ruled the ascendant, and were glad to do him honor. They also sent a Greek newspaper to his friend Charles Sumner, in which the incident was related, or probably we should never have the pleasure of learning it, for Dr. Howe is never the hero of his own story.

To return to his early history. At the time of his return from his Grecian expedition to Boston, Dr. John D. Fisher, who had just completed his medical studies in Paris, came home to Boston, also, with his great heart filled, brimming, with the project of establishing an Institution for the Blind, like that of the Abbé Haüy, with which he had become familiar in Paris.

In a city so renowned for its charities as Boston, the bricks and mortar for such an establishment could easily be obtained. But where could one find the great, organizing, executive mind to be put at its head, and to be its sensorium?

The most sagacious turned to Dr. Howe as the man above all men for the place, and he was appointed. He accepted, and immediately embarked for Europe, to visit the institutions at Paris and elsewhere.

It was while in Paris, on this mission, that his chivalrous spirit prompted him to accept a trust which well nigh proved fatal, not only to the enterprise in which he was embarked, but to his life. This visit to Paris was during the Polish insurrection of 1830—31. A thrill of enthusiasm in behalf of the Poles, as a few years before in behalf of the Greeks, ran through this country, and large contributions of money and clothing were made in their behalf. These donations were forwarded to General Lafayette in Paris, to be remitted by him to their suffering objects. General Lafayette despatched two agents, a French and a German officer, with the succors. One of them was taken prisoner by the enemy; the other was baulked in his purpose and returned. Who now had the bravery and the skill to carry the needed relief to the perishing army?

It should be stated here that a large, perhaps the largest body of the Polish insurgents, had just been driven across their frontiers into Prussia. Prussia stipulated that if they would surrender their arms and dismiss their officers, she would afford them a refuge. But having, for some reasons of state, changed her policy, and become more friendly to Russia, she surrounded the Poles with a cordon of soldiers, and attempted by starvation on her side of the line, to drive them into the jaws of the Russian bear on the other side. It was at this perilous juncture, when, guarded by Prussian soldiers on one side, and watched by Russian victors on the other, and perishing from want within themselves, that Dr. Howe undertook to carry the needed assistance to this hunted band of patriots. He was then on the point of starting for Berlin, to visit the Blind Institution, established there by the Abbé Haüy, a quarter of a century before, and he accepted this perilous commission as an episode. As soon as wheels could carry him, he stood within the Polish cantonments, ground consecrated by the presence of patriots, desecrated by the rule of tyrants. The Poles had been quartered among the peasants, and they were scattered over a space a dozen miles in extent. By the terms of capitulation, their officers had been removed.

One officer, however, having determined to abide the fortunes of his companions, remained; and the more securely to cover his concealment, feigned illness; and from his sick quarters, unknown except by a few trusted ones, all necessary orders were issued. Over this extended space, and among this large number, Dr. Howe began, personally, the distribution of his alms, by traveling from hut to hut, scattering gladness wherever he went. Soon he came to a peasant's rude hut, where, he was told, there lay, in an upper loft, a dying Pole. He ascended to the apartment, which bore all the evidences of a sick man's chamber—the attendants, the silence, the medical paraphernalia; and by the dim light from a darkened window, the form of a man was seen prostrate upon a pallet of straw. Dr. Howe explained his errand, assured him that he came as a friend to help, and not as an enemy to betray. Convinced of this, the feigning sick man sprang upon his feet, and stood before him a tall, gigantic grenadier, ready, as chance might offer, for friendship or for battle—ready for any thing but to live a slave. It was their commander.

The supplies came at a moment when the Polish army was at the point of despair. They were promptly delivered and joyfully received; and Dr. Howe, having fed the hungry and clothed the naked, started immediately for Berlin, to learn how to give eyes to the blind.

Immediately after arriving at Berlin, he accidentally met an American citizen with whom he exchanged cards, giving, most fortunately, the name of the hotel where he lodged. The next morning that citizen called at the hotel and inquired for Dr. Howe, but was told that no such person was, or had been there. Appearances, however, excited suspicion, and by adroit and persevering inquiries, this gentleman found that a body of the police had visited the house during the night; but Dr. Howe, for six weeks, was nowhere to be found by any friendly inquirer; nowhere to be seen by any friendly eye. The facts were, that no sooner had Dr. Howe distributed his succors among the Poles, than they were changed as from dead men to live ones. A new soul had been created within them, and all indications pointed to him as to the Creator. Now let us see what has been the fortune of the moral hero.

In Prussia, every traveler must go from place to place by public conveyance. All public stages are there truly public ones, for they are owned and driven by the government. However urgent one's business may be, whatever emergency may arise, no private man with private horses or private carriage is allowed to help one on

one's way. The government, for police purposes, transacts all this business. They register the name of every passenger, note where they take him up, and where they set him down, so that they can tell the outgoing and incoming of every traveler who passes through the kingdom or moves from place to place in it. Hence the blood-hounds easily tracked Dr. Howe from the camp of the Poles to his hotel in Berlin; and at midnight, on the first night of his arrival in the city, they knocked at his chamber door. On opening it he saw three men. They were clad in citizens' dress, and at first only asked him the news from the camp, and requested his attendance before some civil commissioners. On his declining to go, he was told he must go; and on his demanding by what authority, the captain of the band unbuttoned and laid open his citizen's coat, and showed the uniform and the badge that has all the thunders of the government at its back. He parleyed; and finally, by promising to attend them in the morning, he gained a respite for a few hours during the residue of the night. Availing himself of this critical period, he selected what valueless and insignificant papers he had which he tore into shreds, shuffled and threw into a basin of water, but all his valuable ones and such as might connect him with the transaction, he hid in the hollow of a bust of the king of Prussia, which is almost universally found in all public rooms and places of resort throughout the realm.

With early dawn re-appeared the police, who had watched all night at his door, to conduct him, as they had intimated, to some tribunal or company anxious to hear the news.

Whoever has been in Berlin will remember a vast stone building in one of the most conspicuous streets, nearly in the heart of the city, obtruding its silent horrors upon the sight, and striking with fiercer horrors all the recollections and associations of men. It is the government prison, the Bastile of Prussia. There, in a stone room eight feet by six, without fresh air, without light, Dr. Howe was thrust, and there began a night of darkness, equally impervious to the light of day and the light of hope, and which lasted six weeks. Of all men and their confederates in the underworld, none but the princes of police, and the prince of darkness, knew where he was. No communication by letter or speech was allowed, none save that unseen communication with the great Father of us all, which all good men have, and of which no earthly or infernal foe can rob them.

At the end of two days he was taken before a kind of commission. That tribunal conducted his examination on some atomic or in-

finitesimal theory; for they read to him not less than three hundred written questions, beginning with the names of his father and mother, and evincing the most extraordinary interest in every event that had happened from the day of his birth, and taking down all his answers in writing. At the end of two days more, he was taken before the same officers again, and the three hundred and more questions were all put to him again, and again were all his answers taken down in writing. At the close of the second examination, he was remanded to his dungeon, too small to welcome friend or comforter, but large enough to hold all the spectres of horror or despair, that can ever visit a good man's heart. There, in utter solitude, within stone walls, hard as though each granule in their structure were a tyrant's heart, as though they had been constructed of tyrants' hearts as coral insects build coral reefs, he remained six weeks, having no expectation of any other home or tomb but that, unless, indeed, he might be surrendered to Russia, and doomed to Siberian mines.

One circumstance which transpired, marks the untiring industry of the Prussian police. At his first examination, he saw that the whole mass of papers which he had torn up and thrown into the water, had been taken out, dried, and re-adjusted, part to part, as one re-adjusts the dislocated pieces of a Chinese puzzle. But they did not discover the important papers in the old king's head—not being Yankees.

At his arrival in Berlin from the Polish camp, as I before mentioned, he met an American gentleman, who made a call of civility upon him at his hotel the next morning. The denial that any such person had been there, and the fact that the police had visited the house during the night, aroused suspicions of foul play. This gentleman, therefore, immediately wrote to Mr. Rives, then American Minister at Paris, communicating his apprehensions. Mr. Rives made inquiry of the Prussian government concerning the matter, and was officially informed that no American had been there, only a Frenchman, a confederate of the Poles, who pretended to be an American. But he persisted, and finally, after six weeks of negotiation, and to avoid a threatened collision with the United States, the Prussian government withdrew its retractile fangs from the flesh of its victim. At night his prison door was opened; he was put into a carriage, and supposed he was doomed to Siberia; but the rising sun re-assured him, for he rode in an opposite direction. He was driven six hundred miles without stopping, and tossed across the Prussian frontier with an admonition never to set foot within it

again. His trunk and effects were there all restored to him, except forty-two dollars, retained for prison charges. When I went to Europe with Dr. Howe, in 1843, his name was found still standing on the proscribed list in all Prussian frontiers, and he was still forbidden to enter the kingdom.

The King of Prussia has since relented, for he sent Dr. Howe a gold medal for his wonderful achievement in educating Laura Bridgman—the medal being of a class bestowed only upon those who have performed the most distinguished philanthropic services. It is a curious fact that this medal was of precisely the value of the prison fees above mentioned!

I presume you have all heard something of Laura Bridgman. She was a child, blind, deaf, dumb, and almost utterly destitute of the senses of taste and smell. Here was this glorious world—Nature, Beauty, Love, Humanity, without; there, within, brooded, and slept, and moaned, an immortal soul. What North-west passage, or any other passage, shall be opened to that hidden, spiritual continent, more valuable than any new-discovered continent upon the earth, or any new-discovered star in the heavens? Who shall enter and gather the fruits of this new garden of the Hesperides? What angel shall convey a spark to kindle the incense already laid upon that lovely, but lonely, sequestered altar? There was but one man who knew how to open that sarcophagus and bring to life the immortal spirit within it—and that man was Dr. Howe.

With what deep emotions do we look back to the moments when great events were preparing for their birth—to Christopher Columbus wooing from Nature the secret of another continent; to Sir Isaac Newton, recognizing the invisible bond of attraction that holds the Universe in its beautiful order, or to Dr. Howe, with Laura Bridgman upon his knee, opening an avenue to her soul, and bringing out the captive into the light of day, and the more precious light of knowledge—into the truths that pertain to time and to eternity. Then she was a blank—voiceless, thoughtless, seemingly inaccessible. Now she is learned, sensible, beautiful, and far more intelligent than the average of young ladies, who have had more than her advantages, without suffering any of her privations."

Mr. Mann, (in 1857,) concludes his sketch of Dr. Howe's labors with the remark:—"Although, as Tacitus said of Seneca, 'he would make a fit tutor for a prince,' yet for more than a quarter of a century he has spent his noble and beneficent life among the blind."

And in this field he continues to labor, and at the same time to superintend another institution, which he was equally successful in establishing.

In 1839, Dr. Howe became particularly interested in the instruction of one of his blind pupils, who to the infirmity of blindness added the more formidable obstacle of idiocy, and out of his efforts to overcome these obstacles to instruction originated the Massachusetts School for Idiotic and Feeble-minded Children.* By order of the House of Representatives, January 22, 1846, a committee of five members was named "to consider the expediency of appointing Commissioners to inquire into the condition of idiots in this Commonwealth, to ascertain their number, and whether anything can be done for their relief, and to report to the next General Court." In March, 1846, the Committee reported "that there is no adequate provision by law for the relief, care and treatment of idiots in the Commonwealth." They set forth strong reasons for the belief that the condition of these unfortunates could be greatly improved, and cite the opinion of Dr. S. B. Woodward, the eminent physician of the State Lunatic Asylum, "that nearly all idiots can be made better, the physical condition and personal habits of the lowest order can be improved, and those possessing more mind can be trained to usefulness, and some can be taught to read, write and labor advantageously, and be useful and happy." They close their report by recommending the appointment of three Commissioners to make a thorough investigation of the subject, and report the results.

Of the Commissioners appointed by Governor Briggs, under a Resolve of the Legislature passed April 11, 1846, "to inquire into the condition of the Idiots of the Commonwealth, to ascertain their number and whether anything can be done in their behalf," Dr. Howe was chairman, and drew up the reports—the first of which, a brief document, submitted March 31, 1847, and the last, full and exhaustive, on the 26th February, 1848. This last document was full of painfully-interesting facts respecting five hundred and seventy-four idiots, their parentage and condition, and philosophical conclusions both as to the causes of their low moral, mental and physical development, and the special treatment which their peculiar condition required. It was such a signal gun of distress, in behalf of a wreck of humanity, as to rouse the Legislature and people to immediate action. The sum of twenty-five hundred dollars a year for three years was appropriated in 1848, "for the purpose of training and teaching ten idiotic children, to be selected by the Governor and Council, in any suitable institution patronized by the commonwealth

* The first effort to instruct idiots, so far as we are informed, was made by Vincent de Paul about 1642, but without permanent results. To Dr. Edward Seguin belongs the credit of making in Paris, in 1838, such trials, and demonstrating such methods, as induced other philanthropists to establish institutions for their special treatment.

for charitable purposes." The task was undertaken by Dr. Howe in the Institution for the Blind, and with such success as to command the confidence of the public, and lead to the establishment of a permanent Institution for this unfortunate class. At the end of three years the Legislature increased its annual grant to five thousand dollars, and in 1855 appropriated the sum of twenty-five thousand dollars for a building suitable to the purposes of the school.

The results in various ways of the experiment of teaching and training idiots, inaugurated in this country by Dr. Howe, are thus summarily stated:

"It has shown that idiots form no exception to the law that every form of organized life is capable of being changed for better or worse by surrounding influences.

It has rescued some children of merely feeble minds from the imbecility into which they had fallen, either through abuse, or neglect, or unwise treatment;—children who were considered as idiots, and who would have sunk into hopeless idiocy but for the help of this school.

It has given speech to some who were dumb, and who, if left without special aid, would have remained dumb.

It has greatly improved the condition of more than four-fifths of its pupils, as their friends will testify.

They have been put into a higher state of health and vigor.

They have been trained to the command and use of muscle and limb.

They feed themselves, dress themselves, and conduct with decorum.

Their gluttonous and unseemly habits have been broken up.

They have been trained to temperance, cleanliness, and order, until the new habits have become as second nature.

Their powers of self-control have been increased, and they strive to make themselves less unsightly and disagreeable to others.

Many have been trained to habits of industry, so that they may at least be less burdensome to their friends.

Their mental faculties and moral sentiments have been developed by lessons and exercises suitable to their feeble condition, and they have been raised in the scale of humanity.

Finally, a conviction has been produced in many minds, that idiotic children, if they are considered only as belonging to the great class of the insane, should have special care and training; and this conviction is so well founded, that henceforth some establishment for their special benefit will be considered necessary here so long as

Massachusetts maintains her present high standard of public morality and Christian beneficence."

This sense of duty towards idiotic children has been awakened beyond the borders of Massachusetts.

The Institutions established or supported mainly by State grants for the relief of this class of sufferers at Syracuse in New-York, at Media in Pennsylvania, at Columbus in Ohio, at Lakeville in Connecticut, besides the private school at Barre, are mainly the fruits of Dr. Howe's Report in 1848, and his experimental school at South Boston.

Dr. Howe is not inclined, as many would suppose, from his long and wide connection with Public Charitable Institutions, as Trustee, Superintendent and Visitor, to regard these establishments—each generally on a large scale devoted to a special class—as the indispensable, or in all cases the best modes of treating the peculiar wants of the poor, the infirm, or the criminal, or to desire their needless multiplication or enlargement. In a printed document he says:

"Experience has lessened the enthusiasm I once felt about such establishments, for it has taught me that they are sometimes created needlessly, sometimes even in violation of sound political economy; and that disadvantages and difficulties are often found in their practical operation, which had not been foreseen by their founders.

In one sense, Public Charitable Institutions, like all prisons and other penal establishments, are evils; and are maintained only to avoid greater ones.

True wisdom and charity teach that in the treatment of the paupers, the infirm, and the criminal, the leading principle should be, *separation and not congregation.*

Such persons are in an abnormal and undesirable condition. Peculiarities of character grow out of it, which are intensified by association, and so classes and clans are formed. The true remedy is disassociation—diffusion in general sound society, and the prevention of classes.

The late movement in our State, by which the paupers were gathered in great State Poor-Houses, seemed to be called for by some pressing considerations, but it was in violation of this sound principle.

In many other establishments, the inmates are brought together and treated in classes, not because that is the best conceivable mode, but because it is the best possible one in the present state of society.

Many institutions, such as the Foundling Hospitals, that were once regarded as wise and good, are now, properly enough, falling

out of favor, because suspected of increasing the very evil they were meant to lessen. Others, as Orphan Asylums, Public Reform Schools, and the like, will, I think, be replaced in time by more effectual and truly Christian remedies.

In almost all public, charitable, and penal institutions, with which I am familiar, serious evils arise from violation of the principle, that we should separate and not congregate.

Being called upon lately to give advice about the establishment of Institutions for the Blind and the Deaf Mutes in a new State, I have counselled a course, different from the one I, myself, followed many years ago. It is to dispense with any great costly building, having common dormitories, dining-rooms, chapel, and the like. To make no preparation for any great common household at all; but to build a simple building, with all the conveniences for instructing classes, and make provision for boarding the pupils in private families. In a word, to reduce the Institution, as we would any machine, to the simplest possible form. This is perfectly feasible in many small towns and villages.

In like manner, if proper occasions should present, I would advise modification of several of our public institutions; curtailment of operations in some cases, and total discontinuance of the establishment in others.

In the highest possible state of society there will be the fewest penal and charitable Institutions; meantime we must do the best we can with those whose existence is necessary."

Besides building up the two great Public Charities for the instruction and relief of the blind, and the idiotic, Dr. Howe has taken an active part in the discussions respecting prison discipline, the reform of juvenile criminals, the professional training of teachers, and the improvement of public schools and popular education generally. He was a member of the school committee of Boston, and of the subcommittee of that body, which introduced the practice of examining the schools, and candidates for situations as teachers, by written answers to written or printed questions.* And during his whole life his warmest sympathies and most untiring efforts have been put forth in favor of the enslaved African, and in limiting in every way practicable the area of slavery.

Dr. Howe's Reports and Publications are full of wise, philosophical and practical suggestions on these and kindred topics, as the following extracts will show:

* So far as we are informed, George B. Emerson, in 1821, when Principal of the English High School in Boston, was the first to introduce the practice of examining candidates for admission or promotion by written questions and answers.

VI. INSTRUCTION IN THE GERMAN LANGUAGE.

(Continued from Vol. XI., p. 164.)

In the preceding article the subject was treated under the following heads:—

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First Book. History of German Grammar in reference to the treatment of the German Language in the Schools, since the end of the Fifteenth Century,..... 159
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"Juvenile Exercises on Donatus," &c.,..... 161
Aventinus' "New Rudimentary Grammar,"..... 163
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Fabian Frangk,..... 164

Frangk's book is divided into two parts: orthography, (leaves 2—11), and the "Chancery-book," (leaves 11—44). But the remarkable point about it is, the decided and clear distinction it makes between the written High Grammar, and the dialects. Frangk had listened with an attentive ear in his travels about the Empire, and had carefully observed the peculiarities of the Franconians, Bavarians, Silesians, "Meichssners," Oberlanders and Niederlanders. The result to which he thus came was, that the written language was spoken nowhere. Thus he observes of the vowels, "The German language, if properly spoken, contains, as has been shown, six pure, three double, and three half-double vowels. But there is no country nor nation which pronounces all these correctly; which does not in some way interchange or modify them."† Frangk himself, he says, used the Oberland dialect. But "although this is in itself correct and clear, still it is in many points and parts not in agreement with the High German. For there is no country whatever where it has been so entirely pure and correct both as first spoken and as used since, that something needing correction or improvement can not now and then be traced in it."‡ The question, "How to learn German correctly and purely," Frangk answers as follows: "But he who would avoid such errors, and would write or speak German correctly, must speak German according to the mode and usage of some one country, and must not vary it after other dialectic forms. It will be useful and

Cantzlei, ietz braeuchiger, gerechter Practick, Formliche Missiuen vnd Schrifften an iede Personen rechtmessig zustellen, auffs kurtzst begriffen. M. Fabian Frangk."

* A MS. note in the copy in the Meusebach Library (which I have used) mentions another edition, at Strasburg, without date.

† P. 9. ‡ P. 2.

good for such a person to know the dialects of many countries, with their errors, so that he can avoid them. But that which is most eminently profitable and serviceable to this end is, to take good examples, that is, good German books and legal obligations, either manuscript or printed, to read them diligently, and to imitate whatever in them is proper and correct. Among materials of this kind are documents from the chancery of the beloved emperor Maximilian (of most praiseworthy memory); and of cotemporary writings, those of Doctor Luther; the most uncorrupted, amended, and correct copies of them that can be found."

Thus writes Fabian Frangk, about A. D. 1531. We shall see how correctly he had designated the direction of the future progress of the written High German, and of its management as a study. Frangk himself only gives nine leaves to the subject of German orthography. He then proceeds to his principal subject, the book of forms; and treats in detail of letters, titles, superscriptions, &c.*

The other species of introductions to the reading and writing of German were intended to instruct the laity in reading German books, especially the Bible. How directly this religious intention was aimed at, will appear even from the title of the oldest of them. It is, "*Enchiridion. That is, manual to write and read correctly German orthography and the High German language; together with a register to the whole Bible, by which quotations and concordances in the New Testament may be referred to by the text, and also by Latin words. Also, how to understand figures and German numeration. Made by Johannes Kolross, teacher of German at Basle.*"† This book was in all probability published in 1529.‡ In his preface, the author explains his design still more fully. "Since," he begins, "it has pleased Almighty God in these latter times, to cause the Holy Scriptures (his divine word) to come by means of printing into the hands of the simple lay people, for their good and encouragement, in intelligible native speech, they show no little desire to have their children, who

*I cite from among all the numerous books of forms, rhetorics, &c., only this of Frangk's. This class of works constitutes quite a literature in itself, during the latter part of the fifteenth century and the sixteenth. Of a large number of others which I looked through in the library at Berlin, I shall name only two, viz:—

Fridrich Rieder, "*Rhetorical Mirror (Rhethorichscher Spiegel)*" (*sic, at end*), 1493. folio; and

Melchesner, "*Manual (Handtbuechlin),*" Tübingen, 1550. 8vo.

†"*Encheridion. Das ist, handbüchlin teutscher Orthographi, Hochdeutsche sprauch, artlich zeschreyben vnd lesen, sampt einem Registerlein über die gantze Bibel, wie man die Allegationes vnnd Concordantias, So im Newen Testament, neben den Text vnd sonst, mit halben Latinischen Worten verzaichnet. Auch wie man die Ziffer vnd teutsche zual verstehn soll. Durch Johannem Kolross, Teutsch Lesermaystern zuo Basel Gemachte.*"

‡See the number 1529, given by Kolross, folio 36, as an example in numeration.

are quite unable to study the original tongues of the holy Biblical writings, Hebrew and Greek, and even Latin, educated in the German school and learning." It is for this purpose that the book is prepared. It treats, first, of the distinctions of the letters; then of doubling them, then of abbreviations, punctuation marks, &c., and "At the last follows a little register explaining the order of the books of the Bible, together with the figures and ordinary numeration."

After the time of Fabian Frangk and Johannes Kolross, a great number of such introductions to German orthography appeared; some, like Frangk's, on the plan of teaching secular forms, &c., and some like Kolross', chiefly with reference to learning to read, and to religious books.

Ickelsamer.

Although the labors of Aventinus, as one of those who assisted in the transition from the exclusive use of Latin in instruction, to that of German, must not be passed by without mention, still a grammar of the Latin language with a few remarks in German here and there inserted, can not be termed a German Grammar. The credit, accordingly, of having made the first attempt to prepare a German grammar, belongs to another; to Valentin Ickelsamer.

Ickelsamer was a cotemporary of Luther, studied at Wittenberg, and was a zealous adherent of the German reformation. When however the difference between Luther and Karlstadt became an open controversy, Ickelsamer took part with Karlstadt, went with him to Tauber at Rottenburg, and put forth there a passionate controversial publication against Luther. At a subsequent period he withdrew again from Karlstadt's party, in 1527 came to a full understanding with Luther,* and lived at Erfurt, employing himself with teaching school and grammatical labors.

Having previously published a book on the right method of learning to read,† he put forth his German grammar in 1531, or shortly after.‡ It appeared at first without place or date, with the title

* Luther's letter to Justus Menius. De Wette, vol. 3, p. 190.

† This appears from Ickelsamer's own introduction to his Grammar, p. 10.

‡ Opinions differ as to the time when this first edition of Ickelsamer's grammar appeared. As the point is of some interest, relating to the very first German grammar, I shall go a little more into detail upon it. Some authorities fix the date of the first edition in 1522; as, among others, Hoffmann, "*German Philology (Deutsche Philologie)*," p. 139; Koberstein, "*History of German National Literature (Geschichte der deutschen National Litteratur)*," 4th ed., 1845, p. 460; Ettmuller, "*History of German Literature (Deutsche Litteraturgeschichte)*," p. 328. Pischon, in his "*Guide (Leitfaden)*," gives 1527, as the year of publication; Eitner, in his "*Tables (Tabellen)*," 1525. I think I can show that the Grammar which we have by Ickelsamer can not have been written before 1531. A citation from one of Luther's letters, respecting the date 1527, (De Wette, vol. 3, p. 190), which has been relied on, is not conclusive. For if we read, with Beesenmeyer, "*grammatica sua*" instead of "*tua*" (good Latin-

*"German Grammar, from which one may learn to read by himself; with all that pertains to a knowledge of reading German, its orthography, its defects and superfluities, and much more also. Also something concerning the right method and etymology of the German language and words, and how German words should be divided into their syllables and spelled together. Valentin Ickelsamer."** It was reprinted a little later, by Johann Petreius, at Nuremberg, in 1537. It is a small book, not filling more than five small octavo sheets (pp. 80);† but its contents are in the highest degree remarkable and interesting. The author proves himself familiar with the Latin language, and

ity requires the word to be *ejus*), the reference becomes necessarily to Ickelsamer's earlier grammar, mentioned by himself. But the positive reason for claiming that the grammar of which I am speaking can not have been written before 1531, is this. Ickelsamer says, on p. 57 of the 1st ed., "As the learned Beatus Rhenanus, who was well acquainted with this subject, shows by an instance in his 'Geographia, or Description of some places in Germany;' to wit, that the locality rightly and not arbitrarily named the Concordsberg, is called in German the Kochelsaberg." (Ickelsamer's edition of 1537, more correct both here and in many other places, reads "Kochersberg") I know of no work of Beatus Rhenanus with the title of "Geographia." Nor does Rotermund, in his continuation of Jücher (Vol. 6, No. 1946) mention such a title. Ickelsamer's quotation is however from the learned work of Beatus Rhenanus, "*Rerum Germanicarum libri tres*," Basle, 1531; in which we find (p. 163), the following: "I believe the fortress of Cochesperg (*Cochespergiam arcem*) to have been another citadel originally called Concordia; and that the Germans gradually modified the name Concordia, which was an unknown and unmeaning word to them, until they had turned it to a word meaning a quiver. Any one who understands German will know what I mean."

Ickelsamer refers several times to the same work. Thus in his strange etymology of *Weihnacht* (Christmas), pp. 58, 59, he says, "as in the case, amongst many others, of the word *Weinnacht*, which Rhenanus also explains; the word is derived from 'a night of wine' (*ainer weynige nacht*), spent in wine drinking; a description which does not ill suit Christmas night, which we call *Weinnacht*, and which we pass in drinking and feasting, in the honor of the great God. The name has undoubtedly descended to us from a heathen one; for they were accustomed to honor their gods in that manner." Compare now the following from Beatus Rhenanus, "*Rer. Germ.*," p. 7: "They (viz. the ancient Germans) were in the habit of sometimes passing not only the day but the night also, in carousing; for it is no disgrace with them, says Tacitus, to continue drinking day and night. From which custom the names of some of our own festivals have been derived; such as that at the calends of January, on which, by the custom of Christians, we celebrate the nativity of our Saviour; which is called *Vuinnacht*, an ancient word, undoubtedly handed down from heathen observances, and referring to wine and conviviality."

Besides these undeniable citations, there are others, not so direct. Thus, Ickelsamer says, p. 56, "And that no language whatever, the German especially, is entirely pure, but that they are all mingled up together." Compare with this Beatus Rhenanus, Rer. Germ., p. 110: "For I consider that at the present day all languages are mingled with some others; and that none of them are pure." If it is thus proved that Ickelsamer cited the "*Rerum Germanicum libri tres*" of Beatus Rhenanus, it is also proved that his grammar can not have been written before 1531. For Rhenanus' book first appeared in that year; as it is proved that there can not have been any previous edition, now lost, by the fact that the dedication of it to Ferdinand, the brother of Charles V., is dated "*Selestadii, Calendis Martiis. (Anno* MDXXXI)."

* "*Teutsche Grammatica Daraus ainer von jm selbs mag lesen lernen, mit allem dem, so zum Teütschen Lesen vnnd desselben Orthographiam mangel vnd überfluss, auch anderm vil mehr, zuo wissen gehoert. Auch etlwas von der rechten art vnd Etymologia der teütschen sprach vnd woerter, vnd wie man die Teütschen woerter in ire silben taylen, vnd zuosamen Buochstaben soll. Valentin Ickelsamer.*"

† The kindness of Wilhelm Grimm procured me the use of the first edition, from the Berlin Library, and Prof. Bertheau obtained me the second edition from the library at Göttingen.

somewhat acquainted with Greek and Hebrew.* He cites Quintilian a number of times, and appositely; and is evidently thoroughly trained in the whole of Latin grammar. But that which gives its chief value to the work is, its close connection with the whole intellectual tendency of that great era at which it appeared. Notwithstanding his having once been a victim of the visionary views of Carlstadt, Ickelsamer had retained the true portion of those views whose misunderstanding occasioned the horrors of the Peasants' War. He recognized the profound depths of human nature, and had feelings for the common people.

Ickelsamer's little work is injured by a superfluity of materials; for the author did not confine himself to his own proper design, which, as will readily be seen, is a very simple one, but more than once strays into a field quite foreign to it. He sets up in the beginning a very high ideal of what a German grammar should be. "There has been," he says, "for a long time, no German grammar existing or written, except such as were made by taking a Latin grammar and translating it; as I know by my own experience. But this seems great labor and little profit to one who undertakes to teach German, as it should be said and spoken, in such forms as *der Hans, des Hansen*, &c.; *Ich schreib, ich hab geschriben*, &c. Such inflections will be much better learned from the mother of a child, than from a grammar." But what should be done is, "to set forth clearly and in German, the eight parts of speech and their nature;" and thus give a good German syntax. But this should not be done as "in the common Donatuses for children,"† but by illustrating their correct use in German idioms. Ickelsamer cites the German participle as an instance in point, and repeats his views of the high value of such a German grammar as he describes;‡ and then suddenly ending the discussion, closes his preface, with the words: "This portion of grammar, which is treated of in this my little book, I have considered the best and most useful, and have therefore with pleasure devoted my small powers to it. God grant that all that I have done may be to his glory. Amen." The part of grammar thus

* That he was not very profoundly acquainted with the Greek appears from his remarks on *Xps*, pp. 38, 39; and from the fact of his not mentioning the Greek combinations γγ, γκ, on p. 40. Compare the observations of Kolross on *Xps*, Encheridion, folio 16.

† See, on Donatus, above, p. 397.

‡ Ickelsamer is particularly full at p. 61, in explaining his high demands upon German schoolmasters. It would be very wrong for them to be able or willing to teach only reading, writing, and arithmetic. They should be thoroughly acquainted with the whole of German grammar; and the pupil should learn this grammar before proceeding to any foreign language. I confine myself to this brief allusion in a note to these views, certainly surprising ones for A. D. 1531, as Ickelsamer himself has not set them forth at all in detail, but has limited himself to the "best and most useful part of them."

alluded to, is that indicated in the words of the title, "To learn to read German, and German orthography."

If we agree with Ickelsamer's estimate of the importance of the art of reading, we shall with him recognize it as the "best and most useful part" of grammar. "It is without doubt," he says, "that scarcely any one work or creature on earth has been more used at once to the honor and dishonor of God, than the art of reading, through the writing of many good and evil books. And every one who shall understand and come to the right mode of learning to read, which this book shows, will confess that it is an excellent gift of God, whether he be a wood cutter or a shepherd in the field; and every one may learn by his own labor, without schoolmasters and books. Let him pray to God, as I do."* "I have already printed something concerning the right mode of learning to read, but not so thoroughly and clearly as in this present little book; and nothing else has moved me thereto except of love and pleasure in its subtle art, which I would fain communicate to every man; for it is a holy gift of God, which men ought to use for his divine honor, in humility and fear of heart, and to teach to others. And this reading is such an art that one may learn it in one day, if need be."† "And how well should I reckon this my labor to be repaid, if a single God-fearing person, who perhaps has no place of abode here for any long time (for real Christians are uncertain whether they will abide long in this world,) shall learn it so quickly, and to good purpose, and shall thereafter use it to the honor of God."‡ Ickelsamer wrote his book about 1531. Luther's New Testament appeared in 1522. A book of the Old Testament appeared almost every year afterwards, until at last the first complete edition of Luther's masterpiece appeared in 1534. In such a period, the teacher of reading might well feel himself an instrument in the hands of God.

The new method by which Ickelsamer expected so much to lighten the labor of learning to read, was a sort of method by sounds (*Lautirmethode*). He divided the words into their sounds, arranged and described the sounds, in a mode on the whole accurate and vivid, and lays down the principle that in instructing, a difference should be made between the name of the letter and its sound. We name the letters "Be, ce, de, ef, ge," &c.; so that one letter will no longer serve to designate these words or syllables. For the single letters themselves are too subtle to name, and§ can not all be named, but

*P. 7. I quote always from the oldest edition. Both editions are without numbered pages.

†P. 10. ‡P. 11.

§This word (*und*, and), is spelled *vnnd* in the 1st edition. Although (p. 68), Ickelsamer ex-

all that can be done is, to show how they are prepared in the mouth with the natural organs, though no sound is heard. But if used word or syllable-wise, the letters are more hindrance than help in learning to read.*

The second subject which Ickelsamer promises in his title to treat more in detail, is German orthography. For this he lays down two principal rules. "The first is, that he who would read or write a word, must give diligent attention to the meaning and composition of that word."† "The second, that he say over the word, or its parts, that is, the letters, with his mouth, and ask his tongue how it sounds."‡ The mode of applying this second rule in detail had already been impliedly explained in Ickelsamer's phonic (*Lautir*) method for teaching reading. In applying the first rule, however, he digresses into etymological discussions, sometimes profound, but sometimes very wrong headed. But he has the good sense to recommend, in a special paragraph, "not to desert a passably good common usage in words or speech," for the sake of orthography or etymology.§

Oelinger.

In 1573, Albert Oelinger, public notary at Strasburg, published a German grammar, with the title: "*Instruction in the High German language; Grammar, or institution of the correct German tongue, in which etymology, syntax, and the other portions are briefly treated, each in its order. Written some years ago, chiefly for the use of French youth, but now published at the instance of sundry persons, and not less useful than necessary to most of the neighboring nations. With the opinion of Master Johann Sturm, respecting the knowledge and practice of the tongues of the present day. By Albert Oelinger, notary public at Strasburg. Strasburg, printed by Nicholas Wyriot,* 1573." 8o.‖

I have given this title in full, as very clearly expressing the pur-

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pressly forbids the double s in the word, he has left many *vnnds* in the book. Even after his repudiation of it at p. 68, I counted no less than sixteen of them, to the end. But it is remarkable that in the "reading manual," viz., pp. 71-74, the correction has been accurately made; so that there is no *vnnd* on those pages.

* P 13. † P. 24. ‡ P 25. § P. 62, *et seq.*

‖ "*Underricht der Hoch Teutschen Spraach; Grammatica seu Institutio Verae Germanicae linguae, in qua Etymologia, Syntaxis, et reliquae partes omnes suo ordine breviter tractantur. In usum juventutis maxime Gallicae, ante annos aliquot conscripta, nunc autem quorundam instinctu in lucem edita, plaerisque vicinis nationibus, non minus utilis quam necessaria. Cum D. Joan. Sturmij sententia, de cognitione et exercitatione linguarum nostri saeculi. Alberto Oelingero Argent. Notario publico Auctore. Argentorati, excudebat Nicolaus Wyriot.* 1573."

Hoffman, ("*German Philology*," p. 139,) gives 1574 as the imprint. This is however wrong, unless there was a second edition. The copy from the Munich library, which I have used, has 1573, both in the title and at the end.

pose and contents of the book. Oelinger wrote it as a book for foreigners to learn German from. In his epistle dedicatory to the duke of Lorraine, he states this design still more plainly. Poles, Bohemians, Hungarians, Italians, Frenchmen, Englishmen, Scotchmen, Danes and others, he says, need a knowledge of the German tongue, in part by reason of their intercourse with that nation, in part on account of the important matters which have taken place in Germany, and have been commemorated in the German language. But, he continues, the German language can no more be learned correctly without a grammar, than the Greek or Latin. He therefore looked about among the booksellers, in order if possible to find a German grammar which would answer his requirements. But the bookseller had no such for sale, and usually said that they were altogether doubtful whether the German language could easily enough be brought under definite grammatical rules; and thus it has happened that although some grammars of our language have been elsewhere published, they have been as wide of correct German, as the Doric Alpha from the Ionic Ita.* For these reasons he had concluded to supply this want.

With regard to the "*dialectus*," and "*idioma*," which he himself uses, Oelinger says, at the conclusion of his grammar, "The idiom which we have used is that common to all the people of Upper Germany; and in like manner we chiefly recommend such books as are printed in the same; as at Frankfurt, Mentz, Basle, Leipzig, Nuremberg, Strasburg, Augsburg, Ingolstadt and Wittenberg.† The text of Oelinger's grammar is Latin, and its arrangement is in general similar to that of the ancient grammar. It does not however slavishly follow the Latin grammars, but agrees with the Greek, where the latter language is more like German than the former is.‡ The book treats successively of teaching the letters and sounds, then of the eight parts of speech, article noun, pronoun, verb, &c., all with full paradigms. Then come very brief portions on syntax and prosody.

If it is remembered that Oelinger had to construct his whole system from the unarranged materials of the German language, with no help except what he could obtain from a classical grammar, we shall readily acknowledge the merits of this first effort.§

An especial interest is given to Oelinger's book by the fact that

* Reuchlin's pronounciation of *eta*.

† P. 200. ‡ See *e. g.*, p. 23, on the eight parts of speech.

§ Oelinger, for example, avoids the easy path of many later writers, who recognize the "weak conjugation" as the only regular one, and call the "strong conjugation" anomalous. He admits four regular forms of conjugation in German, giving the strong verbs to the three former, and the weak ones to the latter. (P. 96, &c.) He has many facts of interest for the history of the language, which we have not here space to consider. Thus, he gives the end-

Johann Sturm, in his time so eminent as an educator, prefixed a particular recommendation to it.* In this opinion, which is addressed to Conrad Preslausky, secretary of the kingdom of Poland, he considers Oelinger's German grammar as the first which has appeared in Germany; and lays down the dictum that modern foreign languages ought to be learned and used, not only with earnest study, but according to the rules of art. This, he says, is particularly necessary for those concerned in embassies; of whom those always succeed best who can use the language of those to whom they are sent. The languages of the Greeks and Romans, are no doubt exceedingly excellent in words and in thoughts, "but if they are not understood, what power for conviction can they have.†

Clajus.

It will not have escaped the attention of the reader, that we have hitherto only very cursorily alluded to one of the most important questions which can be asked respecting a German grammar, viz., What phase of the German language—what dialect—did the Ger-

ing *en* for the genitive and dative singular of some feminines (as *frawen*); but the form of the nominative (*frau*) for the accusative singular.

*For Sturm's views on the exclusive use of the Latin, see this work.

† Any person who has studied the history of German grammar sufficiently to be acquainted with the title of the grammars which appeared during the sixteenth century, will perhaps wonder that I have not mentioned an often cited book, the "*German Grammar or Art of Language, A most certain method, &c.*, (*Teutsch Grammatik oder Sprach-Kunst. Certissima ratio,*) *&c.*," by Laurentius Albertus Ostrofrancus. Augsburg, 1573. 8vo. But it was not my intention to notice all the books on the subject, of the sixteenth century. And I had besides a very particular reason for omitting to speak of this Laurentius Albertus, a copy of whose work, from the Berlin library, I have used. This is, that he is in many places merely a duplicate of Oelinger. What the precise nature of the case is, I have not yet clearly ascertained; but am satisfied that at any rate either Oelinger or Laurentius Albertus copied without permission from the other. Whole sentences coincide almost word for word. See for instance, at the words "*Poloni, Boëmi,*" &c., Albert, fo. 10, and Oelinger, fo. 4; Albert, fo. 11, III, and Oelinger, fo. 2; Albert, fo. 31, "*Idioma vero,*" &c., and Oelinger, p. 200. It is quite impossible to explain such coincidences as mere chance; although perhaps in such cases as the above, a sufficient excuse may be found even for a verbal transfer from another author without naming him. But there can be no such excuse for doing so with whole sections of a grammar. And that one of the two had the book of the other, or at least parts of it, before him, will not be doubted by any one who will compare what Albertus says of gender, fo. 45, &c., with Oelinger, p. 34, &c.; and Albertus on declension, fo. 62, &c., with Oelinger, p. 55, &c. The question to be decided is, therefore, which of the two made this unlicensed use of the other? The *prima facie* evidence would seem to make Oelinger the delinquent; for although both books are dated 1573 on the title page, yet the dedication of Albertus (fo. 10,) is dated "*Wurtsburgi 20 Septemb., anno, 72;*" while Oelinger's is '*Argentinæ pridie Nonarum Septembris., anno, 1573;*" so that the work of Albertus would thus seem to be almost a whole year older than Oelinger's. The considerations which have decided me, nevertheless, to set down Albertus for the copyist, are the following:—

1. Oelinger's book is beyond comparison better than that of Albertus, as will be easily perceived on comparing the passages above cited on declension, or indeed those on conjugation, (Albertus, fo. 77, &c., and Oelinger, fo. 96, &c).

2. The occasion of writing Oelinger's book is clearly set forth in the dedication, and the whole work corresponds to the design there stated. This can scarcely be said of the dedication and book of Albertus.

3. The prefixed recommendation of Sturm, at that time one of the most distinguished edu-

man grammarians select to teach? We have already become acquainted with one of the pioneers of German grammar and German orthography, who answer this question with remarkable acuteness. This is Fabian Frangk, who does so by his reference to Emperor Maximilian's Chancery and to Dr. Luther. Although this same way of thinking was continually gaining ground during the sixteenth century, still the grammarians proper, seems to have reached a clear understanding on the subject, only by gradual degrees. In the present account, we have closely followed the methods of the first German grammarians themselves; and these, again, are exactly a true expression of the condition out of which, the German written language was just then, for the first time, beginning to rescue itself. Ickelsamer complains bitterly in various places, of the shameful neglect of their own orthography and grammar by the Germans.* "What encouragement," he asks, "has any one to write a grammar for the people of Germany, who neither value their language, nor have any love of it, nor pleasure in it, nor will apply any industry in learning it?"† Again he speaks of "the rescue of our common German tongue, which is now so uncultivated and corrupted."‡ In another place he admonishes not to vary from "the long accustomed use of German words,"§ and "that we ought to write and speak as the common custom directs."‖ But to the

cators of Germany, is evidence of the integrity of Oelinger; whereas I have so far been unable to find any testimony of a decisive kind to the character of Albertus.

4. Oelinger's book contains more than one very intelligible hint that its matter would be stolen by some dishonest person. An epigram by the author to the book, at fo. 8, says:—

"Esse tui domini dices si forte rogabit
Lector: in apertum vulgus iture liber.
Bis tanto valeo, quam si mittaris ab ullo
Ex me, qui didicit: non docuit: sed ego."

"If the reader shall ask of thee concerning thy author, O book about to go forth amongst the community at large, reply; that you are worth twice as much as if put forth by one who had been my pupil; he would not teach, but I."

And at the end of the book, in a poem by Jacob Hartmann on the publication of Oelinger's grammar, he is exhorted to put it in print, "lest another should reap the fruit, who did not sow. But let the best prevail, and the unjust party be driven off the field." And in another poem, Jacob Meier, says, addressing the book, "Why did Oelinger keep you back from the press for nine years? Because furtive fraud was despoiling your wealth."

All this seems to give a pretty clear insight into the real state of the case. A full history of German grammar would of course discuss whatever are the real characteristics of Albertus; but I am obliged to omit doing so, at least until he is freed from the charge which I have mentioned. The fact that Albertus was a Roman Catholic, can not be supposed to have prejudiced me against him; for as all appearances indicate, he was not regarded with any special favor by the Catholic schools of the sixteenth and seventeenth centuries. (See below, under Clajus). I will add, as a hint to any one disposed to investigate this matter further, that it seems not altogther improbable that subsequently to the robbery by Albertus, Oelinger may have made some supplementary use of his book, which was printed before his own.

* P. 23.

† A very serious consideration for Ickelsamer. Comp p. 78. In my quotations from him in this chapter (on Clajus), I have substituted i and u for his j and v.

‡ P. 23. § P. 62. ‖ P. 53

question where the "common German tongue" and the "common custom" are to be found, no answer is given. Ickelsamer knew very well how great were the differences among the High German dialects.* But he gives no directions for choosing among them in writing German. His rule to ask our own ears and tongue how a word sounds,† is no answer to this inquiry; and experience must very early have taught him that it would be far from being in one uniform way throughout Germany, that the children would "learn from their mothers how to say and speak '*Ich schreib, Ich hab geschriben.*'"‡

Oelinger thought it necessary to state, at least, at the end of his grammar, what dialect of the German language the book taught. In a paragraph already quoted, he designates the area of the High German dialects as distinguished from the Low German; and by referring to the books printed in High Germany, he makes a difference between a written dialect common to all parts of Upper Germany, and the varying spoken dialects of the country people. In order to gain a fixed rule for the German written language, the only further steps now necessary was, to make an end of the variations in the practice of authors, by fixing upon the usage of the greatest German writer, Luther, as the rule.§ This great step was taken by the grammar of Clajus.

The course of the German grammar in this process was entirely parallel with the gradual fixation of the New High German written language. Had Luther, as has been sometimes supposed, elevated one of the dialects spoken in a district to a new dignity as the written language, and by so doing, driven a previously received written language out of use, the first and most necessary step for a German grammarian would have been, of course, to explain the differences of Luther's language from that which preceded it. But the fact was very far otherwise. Luther found the language which he adopted already in use in a very large part of Germany, as the language of the chanceries of the princes, and of books. Luther's own statements in the Table-talk‖ are clear enough. He says, "I have no definite, peculiar German language of my own, but use the common¶ German language, so as to be understood by the High Germans and Low Germans both. I speak after the usage of the Saxon chancery, which is followed by all the princes and kings in Germany. All the imperial cities and the officers of the princes write after the usage of the Saxon

* P. 46. † P. 25. ‡ P. 2.

§ It is not a pedantical confinement to Luther's style which is meant, such as was the rule of the Ciceronians of the sixteenth century regarding Cicero, but only that Luther's autorial delineation of the field of the language was generally accepted as correct.

‖ Fo. 578, of the edition of Eisleben, 1566, in folio.

¶ Compare the citation from Ickelsamer, above, p. 155.

chancery and of our own prince. Therefore this is the most universal German language. The Emperor Maximilian, Elector Frederic,* &c., have thus established a fixed usage for the German language in the Roman Empire." The substance of this statement of Luther is confirmed not only by the papers issued from the Saxon chancery, but by those from that of the empire. And in like manner the German works printed during the fifteenth century at Nuremberg, are substantially in the German of Luther.† Luther did not adopt any distinct dialect, but the common German language as he found it, as it had developed itself from amongst the mingled dialects of central and eastern Germany, and had become established in the imperial chancery as the recognized reigning German language. But even in the localities where this authoritative German language had become the leading one, it suffered many dialectic modifications; and from this common German language, based mainly on the spoken dialects of central and eastern Germany, there had arisen both in northern and southern Germany, the most different modifications, which were employed even for printed books. In Lower (northern) Germany they were printed in Low German, in Switzerland in Swiss German. Luther unquestionably contributed much to spread the domain of the authoritative German, and often to fix it permanently in the forms which he himself used.‡ The predominance of this new written language over the

* Frederic the Wise; died 1525.

† Compare for instance the German Bible "in correct common German," "printed by Anthony Koburger, in the worthy imperial city of Nuremberg," 1483. It is not my task here to write the history of the High German dialect, but only to give a general account of the substitution of Luther's German for the Middle High German. For the relation of the New High German (Luther's) written language to the district oral dialects and to the earlier written language, see R. von Raumer, "*On the German Orthography (Ueber Deutsche Rechtschreibung)*," Vienna, 1855, p. 85, *et seq.* I will here cite a single striking instance of the struggle between the dialectic forms of south-western Germany, from which mainly was derived the Middle High German, and those of central and eastern Germany, where the New High German originated. Niclas von Wyle, born at Bremgarten in the Aargau (see his "*Translations*," 1st ed., fo. 243), secretary of the council at Nuremberg, (ib., fo. 4), afterwards city clerk at Esslingen, (fo. 71), and finally chancellor of Count Ulrich of Wirtemberg, (fo. 3), published in 1478 a number of translations and epistles. Although his dialect has evidently felt the influence of the language used in the chanceries of the day, still he uses in many important cases the forms of his native locality, instead of those of central and eastern Germany. He makes y and i equivalent to the Middle High German î.; and v and u, to its û. His first edition is printed in this way (but not that of Augsburg, 1536); and this was evidently the author's own dialect, as appears from his own remarks at fo. 243; for there he distinguishes *minn* from *min* by doubling then. Such were the forms used by Niclas von Wyle, while city clerk of Esslingen, about the middle of the fifteenth century. With his writings may be compared the decrees of the Diet of Worms, *anno* 1495, as printed immediately after it by the imperial cities for private use, and issued from the archives of Esslingen itself. (Datt, "*De pace publica*," Ulm, 1698, p. 825; Schmauss, "*Corpus Juris*," Leipzig, 1759, p. 56. It will then be easily seen what is the precise force of Luther's words just quoted, about the Emperor Maximilian

‡ On the progress of the written New High German independently of Luther's influence, see also Friedr. Zarncke, in his edition of Sebastian Brant's "*Ship of Fools (Narrenschieff)*," Leipzig, 1854, p. 276. The character of the New High German was no doubt the chief cause

separate dialects is of course connected with its growth out of the eight hundred years' written development of the Middle and Old High German, but it owed its new impulses of power and feeling to the spirit which the great reformer breathed into it.

Ickelsamer was conscious of the existence of a "common German tongue," but was unable to give any clear account of it. Oelinger recognized the language of the books of Upper Germany as the subject of his instructions. But Clajus established the doctrine that Luther's German was the standard written German.*

Johannes Clajus was born A. D. 1533, at Herzberg, a town on the Black Elster, some six miles† from Wittenberg. He attended school at Grimma, studied theology at Leipzig, taught music, poetry and Greek at Goldberg, from 1560 (?) to 1569, and was then for a short time rector at Frankenstein in Silesia. Becoming weary of his labors in the school, he went to Wittenberg, and took a master's degree there in 1570; but in the same year again accepted a school appointment, as rector of the city school at Nordhausen. In 1572 he resigned this place, and in 1573 became minister at Bendeleben, a village in the bailiwick of Weissensee in Thuringia, where he died in 1592.‡ In a series of published writings, he showed himself a learned and accomplished scholar in Latin, Greek and Hebrew. Among these works we find "*Three books of Latin, Greek and Hebrew Prosody;*"§ six books of Greek poems; a Hebrew grammar; German poems, &c. Far the most important of his works, however, was his German grammar, upon which, by his own account, he had labored

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of its obtaining the prominent place which it already held before Luther. See my essays on German orthography, p. 93, *et seq.* But the powerful influence which Luther exercised, more especially upon the intellectual development of the new language, can not be overlooked.

* Of the grammarians of the sixteenth century whom we mention here, no one recognized quite accurately the real nature of the New High German written dialect. Fabian Frangk came nearest to doing so. The imperial chancery was mentioned as offering a proper standard for a common written German by the learned philologist and educator Hieronymus Wolf, in a work "*De Orthographia Germanica,*" whose second edition appeared as an appendix to the '*Institutionum grammaticarum Joannis Reuchlini libri octo.*" Augsburg, 1578. (Hoffmann, in his "*Outline of German Philology* [*Die deutsche Philologie im Grundriss*]" mentions a previous ed. of 1556.) But Wolf was not capable of making a proper use of his conception. (Compare my essay in Pfeiffer's "*Germania,*" 1856, II, p. 160, *et seq.*) Appeals to the German of the imperial court and of the imperial chamber of justice at Spires may be found down to a late period in the seventeenth century. (See W. Wackernagel, "*History of German Literature,*" p. 369). But the importance of Luther's influence on the language is shown by the very fact that notwithstanding this, his writings have been far more extensively appealed to as the fixed standard for German grammar.

† About twenty-five English miles.

‡ Jördens, "*Lexicon of German Poets and Prosemen* (*Lexicon deutscher Dichter und Prosaisten*)," I, 302. Clajus, "*Grammatica Germanae linguae,*" preface.

§ "*Libri tres prosodiae Latinae, Graecae et Ebraicae.*" Thus cited by Clajus himself in his preface to his German Grammar. The full title was somewhat longer. It appeared at Wittenberg, 1578, 8vo.

more than twenty years.* He published this work in 1578, at Leipzig, with the title; "*Grammar of the German language, by Master Johannes Clajus of Herzberg. Compiled from the German Bible, and other writings of Luther.*"† In his preface, he expresses himself like a true German, and also as a zealous Protestant and enthusiastic admirer of Luther. To the Germans, he says, appertain the kingdom and the priesthood (*ius regni et sacerdotii*); for the power of the fourth monarchy (of prophecy) has descended from the Romans to the Germans, whose princes choose the Emperor. "And the true priesthood," he continues, "which consists in preaching the evangel of the true sacrifice of Christ, is taken from the unbelief of heathen worship and of popish darkness, and by God's special goodness intrusted to us; so that the saving truth of the justification of men, can now be learned, no longer exclusively by learned men out of the Hebrew and Greek of the prophets and apostles, but by the German people, out of the clear stream of Luther." And to these two benefits is added a third, that besides the knowledge of these holy things that pertain to our salvation, which are so clearly and fully set down in Luther's writings, one may from the same writings obtain also the most surprising and complete knowledge of the German tongue, useful and necessary both to that nation and to foreigners. "This knowledge," he adds, "I have in this book set forth in grammatical rules, collected from the Bible and other works of Luther. For I hold his writings to be not so much the work of a man as of the Holy Spirit of God, speaking through a man, and am entirely convinced that the Holy Ghost, who spoke pure Hebrew through Moses and the other prophets, and Greek through the Apostles, also spoke good German through his chosen instrument, Luther." For otherwise he considers that it would have been impossible for a single man to have spoken such pure, forcible, and elegant German without instruction or help from any person.

These extracts clearly show the spirit in which Clajus wrote. But it would be an error to expect from his grammar the same that we should now require of a grammar of Luther's German. He only undertakes to lay down in his unpretending book, the most important outlines of the German written language, as used by Luther, in order that, as he expresses it,‡ foreigners may more easily learn to speak German, and our own people to speak more elegantly and write more

* Preface to the Grammar.

† "*Grammatica Germanicae linguae M. Johanis Claij Hirtzbergensis; Ex Bibliis Lutheri Germanicis et aliis eius libris collecta.*

‡ P. 1.

correctly. He then proceeds to set forth the different parts of grammar in the method of the Latin grammars of the day, as, 1. Orthography; 2. Prosody; 3. Etymology, with very full paradigms; and 4. Syntax. There are also two more chapters, on the ancient poetical methods of the Germans, and on the imitation of the ancient metres in German. However much the rules of Clajus may fall short of our present knowledge of German, still we can not deny to his book the possession of a good share of merit for those times, for industry, correct observation,* and above all, practical usefulness. One of its most objectionable characteristics, though one very easily explained, is its almost slavish adherence to the Latin grammar. Thus he calls the German direct praeterite "*imperfectum*;" and imitates the Latin tenses by cumbrous German circumlocutions, as, "*wir werden geliebet haben; wir werden geliebet sein worden; werden geschrieben werden, scriptum iri*;" and so on. Clajus writes throughout not for children who are just beginning to learn to read and write, but for those who have already some knowledge of Latin, Greek and Hebrew. This is evident not only from the whole character of the work, but also both from the fact that it is written in Latin, and from the examples given here and there from Greek and Hebrew, by way of additional illustration. He expressly declines considering the numerous dialects of German.† His adherence to Luther's authority is left as a thing supposed of course, after his declarations in the title and preface; and he gives quotations from Luther only in a few individual instances, chiefly doubtful points.‡

The extensive circulation of Clajus' grammar, and its consequent great influence is shown not only by the number of its editions and the duration of its reputation, but still more by one very noticeable circumstance. This is, that it was received with favor not only by the Protestant part of Germany, but, although expressly based on Luther's writings, by the Roman Catholic part of it also, and with a favor both prompt and lasting. The Royal Library at Munich possesses a copy of the first edition which affords a very remarkable evidence of

* Clajus also reckons both strong and weak verbs among the regular ones. (See his grammar, pp. 141 and 177). But his classification (p. 144) of verbs by their last syllables is a great mistake. He contains much that is very instructive. See *e. g.*, his rule for the imperfect, p. 143. "In the imperfect the first and third persons singular are alike, and all the other persons have the same vowels and dipthongs; as, *Ich sang*, I was singing, *er sang*, *du sungest*, *wir sungen*," &c. This rule is also given for the third class of verbs (in Gothic, ei, ai, i, i): see p. 115, *Ich schreib*, *du schriebest*, *er schreib*, *Wir schrieben*, &c. And comp. pp. 145, 161. See also, on this point, on one hand, the well-known Old High German and Middle High German rule, and on the other, Schottelius, "*Complete System of the leading German dialect*, (*Ausf. Arbeit Von der Teutschen Haupt Sprache*)," Brunswick, 1662, p. 578 *et seq.*

† P. 3.

‡ *E. g.*, p. 31, on words of doubtful gender; and p. 247, on the construction of "*jenseit*."

this. It has written on the outer cover of the binding the words, "Liber Collegii Societatis Jesu Monachii Catalogo inscriptus. Anno, 1595." In the title, the words "Ex Bibliis Lutheri" are strongly lined out, and the preface, from which I quoted the enthusiastic expressions about Luther, is carefully cut out.* But they behaved very liberally in the body of the book, where very bad things have been left untouched; such as not only the first stanza of Luther's "A mighty tower is our God," at p. 270, but the stanza given at p. 266, as an example of the "Dimeter acatalecticus constans syllabis octo;" "O Lord, uphold us by thy word, and check the crimes of Pope and Turks." The Jesuits were strongly opposed, no doubt, to the introduction of the common language into the schools;† but that acute order was far too practical to lose those advantages which Luther and his fellows had gained by their employment of the German language.‡ Many of the writings issued for the common people by the defenders of the Roman Catholic church in the second half of the sixteenth century, show how much of useful material they gathered from the study of Luther's writings.§ We need not therefore wonder to find them seeking advantage from the use of a grammar based on "Luther's Bible and his other writings."

The history of Clajus' book shows how deeply seated was its reputation, and how widely spread, even in Catholic Germany. It went through no less than eleven editions from 1578 to 1720; a number far beyond that reached by any German grammar of the sixteenth or seventeenth centuries. And an especially remarkable circumstance is, that it is clear that the editors constantly paid increasing attention to the circulation of the book in Catholic countries. Thus we find omitted, especially in the later editions, all the portions struck out or cut out by the Jesuits in the Munich copy. The fourth edition, (Eisleben, 1604)‖, at any rate omits from the title the obnoxious words "From the German Bible of Luther and his other works," and substitutes "Collected from all the best authors." But it still retains

* Compare the Apostolical Letter of Gregory XIII, A. D. 1575, in the "*Institutes of the Society of Jesus (Institutus Societatis Jesu)*." Prague, 1757, vol. i., p. 43.

† See History of Pedagogy, vol. i., p. 335. The case was not very different in the classical schools of the Protestants. *Ib.*, i., 218, 299, 315.

‡ Compare, among other authorities, the "*Institutes of the Society of Jesus*," vol. i., p. 390.

§ Compare, for example, the "*Explanation and confirmation of Christian and Catholic belief, by the saints, (Erklaerung vnd beuestigung Christlicher vnd Catholischer bekanntnus, von den Heyligen)*," prefixed to the German Church Calender of Adam Walasser and Peter Canisius, Dilingen, 1504, p. 4.

‖ In the Royal Library at Berlin, I have thus far been unable to find the second and third editions, which must have appeared between 1578 and 1604. But they could make no material change in the statements of the text.

the author's preface, with its enthusiasm for Luther. In the eighth edition (Jena and Leipzig, 1651,*) the preface also is omitted, so that the contents of the book correspond exactly with those of the copy in the Jesuits' College at Munich. But the obnoxious passages within the book itself, which as we have seen were left untouched by the censorship of the Jesuits, remain here also, as they do in the tenth edition (Frankfurt on the Maine, 1689).† The eleventh edition, which appeared at Nuremberg and Prague in 1720,‡ goes one step further, omitting the worst of the citations, that referring to the Pope and Turks, and substituting "O Lord, thou great in grace and faith, give ear when unto thee I call."§ But other citations from from Luther including "A mighty tower," remain.

Thus the German of Luther had become the written language both of Catholics and Protestants, as early as 1600. The little grammar of Clajus did not of itself produce this great effect. To assert that would be ascribing far too much importance to grammar in general, and to that of Clajus in particular. It would be much nearer the truth to say that the mind whose power in language had thus subjected Germany, was that of Luther. But still, the unobtrusive book of the pastor of Bendeleben is of no little interest, both as the external sign, and as the agent, of the spread of Luther's German.‖

CHAPTER II.—SEVENTEENTH CENTURY AND FIRST HALF OF EIGHTEENTH.

Review of the German in the Schools of the Sixteenth Century.

We have shown in the course of the history of German grammar, the parallel which existed during the sixteenth century between the progress of the fixation of the New High German written language, and the progress of the labor devoted upon the elaboration and diffusion of it. It is only after such a delineation as this of some of the separate facts of the grammatical treatment of the German language, that we can now proceed to inquire into the relation of these efforts, to the schools and to instruction. The first thing that strikes us is

* In the Royal Library at Berlin.

† In the town council library at Leipzig.

‡ Royal Library, Berlin.

§ I have already shown how Luther availed himself of the Imperial dialect already existing. I have shown, in my work on the influence of Christianity on the Old High German, how his modes of expression are based, not only in general, but also by the closest dependence, upon the progress of the middle ages in Germany. The importance of the influence of the German theologians and mystics upon Luther's language, will the more clearly appear, as Franz Pfeiffer's critical editions of those important writers are further diffused. But no one can deny that all this material was worked over in Luther's mind, reshaped, inspired with new life, and thus made far more efficient for the common benefit of the German people.

‖ P. 293.

their isolated and disconnected character. We find but the very remotest allusions to the relation between instruction in German and general culture.* Generally speaking, educators proceeded on the ground that every one had of course a satisfactory knowledge of German; and it was fortunate if they did not—as many of the most influential of them did—exert themselves deliberately for the suppression of German. Notwithstanding, however, the necessity of some instruction in German made itself evident in very many ways, and at the most various points in the line of educational development; but without any conscious coöperation amongst them. Thus we find on one hand, German A B C-books and introductions to reading and writing for beginners; and on the other, grammars of German written in Latin, for those already possessed of more or less acquaintance with Latin, Greek, and even Hebrew. But although there was no conscious connection between these scattered endeavors, it is not difficult to ascertain and state the bond which did in fact connect them all together. It is writing, and the written language, to which all these means of instruction point, whether like the reading manuals they lay open the first entrance into the world of German books, or, like the grammars written in Latin, they teach the right use of the High German language. It was reading and writing which necessitated the teaching of the native language in the schools; and accordingly, we see this department of instruction going forward equally with the fixation of the written language in the chanceries and in literature. How close was the connection between the regular giving of instruction in German, and its written use, is shown in the case of an individual who belonged to the transition period of the language in the fifteenth century. Niclas von Wyle, chancellor of Count Ulrich of Wirtemberg, about 1478,† relates of himself, that on previous occasions, many well educated youths, children of respectable and pious people, some of them having taken a bachelor's degree, had been sent to board with him from many places, to be instructed and trained in the art of writing and of drawing papers.‡ For these pupils he first made his "translations" from the Latin; and in the same work he gives a treatise with directions for them in the correct mode of drawing up titles and headings, with occasional remarks upon the proper orthography for chanceries.

* See above, p. 405, on Ickelsamer. † See above, p. 407, note 2.

‡ From his Translations, 1st ed., fo. 4, "Drawing papers" is "dichtens;" etymologically related to the Latin *dictare*, dictate, but by usage now meaning to write poetry. Compare Frangk, Orthographia, Franckfort, 1531, fo. 12; "to train skillful writers of papers (*geubten schreibern des gedichts*), for chanceries and other public offices."

Like the mode of instruction in the use of German in the chanceries, so the A B C-books and spelling-books, were of course most closely connected with the written use of the German language. We have already seen that these books began to appear before the beginning of the new period. But their real importance and diffusion first took place in consequence of the two great occurrences of the fifteenth and sixteenth centuries; the invention of printing and the Reformation. The former of these first rendered practicable the general diffusion of the art of reading; and the latter, and above all Luther's Bible, rendered that art a necessity to the people. For these reasons it is that we see the common schools, properly so called, prospering after the Reformation to an extent unknown in any previous period. The school law of Duke Christoph of Wirtemberg, of the year 1559, designates the "German schools" as the lowest grade; in which boys and girls, separate, are to learn reading, writing, arithmetic, and singing;* and these German schools are to be also "in the little villages and hamlets."† Similar provisions are found in the school law of Elector Augustus of Saxony, of A. D. 1580.‡ It was for these schools and for their teachers, that the A B C-books and the instructions in teaching reading which we have mentioned, were respectively intended.§ These little elementary books stood at one end, and the German grammars written in Latin at the other, of a course of instruction in the correct mode of using German in formal papers, oral addresses, and books. But the attempt to include all this in one system, and to determine a fixed and important position in the whole system of instruction, belongs to the beginning of the seventeeth century. This important and influential step was taken by Ratichius and his associates.

Ratichius and his Associates.

Wolfgang Ratichius, born at Wilster, in Holstein, in 1571, and who died in 1635, belonged to that remarkable class of men who, feeling a well-grounded impulse to become reformers, and not deficient in gifts or in just perceptions, yet, after a laborious and unstable life, fail to attain the end which they propose, for the reason that they lack modesty to define properly their own mission, and not to overestimate the importance of their reform and the measure of their abilities. The fate of such men commonly is, in the beginning of their career, to enlist the greatest interest and most zealous assistance

* "*Attempt at a History of Classical Education in Wirtemberg (Versuch einer Geschichte des gelehrten Unterrichtswesens in Würtemberg),*" by Dr. Karl Pfaff, Ulm, 1842. "*History of Pedagogy,*" i., 312. Barnard's "*American Journal of Education,*" vol. vi., p. 426.

† "*History of Pedagogy,*" i., 312. Barnard's "*Amer. Jour. of Education,*" vol. vi., p. 425.

‡ *Ib.*, i., 431. § See above, pp. 401, 404.

of their cotemporaries; but if they fail to fulfill the great promises which they make in advance of any experiment, then to find themselves at once forgotten by the majority, while their enemies' assertions are believed, that their whole enterprise from the beginning was only a juggling trick. Thus they are quite forgotten until a less partial posterity again directs attention to them, and shows how many correct and even fruitful seeds were hidden under the chaff of their fancies and obscurities.

It is my present business to discuss the new methods of Ratichius only so far as they relate to instruction in German, and the place of that language in a course of education.* Ratichius and his associates were the first to undertake to make the German language the basis of all subsequent instruction of whatever grade. This they did in two separate ways; and they can not be denied the credit of having in one of these begun a career of improvement which attained its full development only in a later age; although in the other one, they originated many errors by a mixture of right and wrong. The first of these modes was the unconditional assertion that the German language was the instrument which the schools must use, in order to proceed to the mastery of other language. They considered the native German of the pupils not, like many of their predecessors, as a necessary evil, which was to be got rid of as soon as possible, but as the most efficient and appropriate instrument for the communication of other knowledge. Their second proceeding, however, was not merely to consider the German language as the innate and coexistent instrument of the pupil, but also to commence their instruction in language with a grammatical dissection of German; and Ratichius laid much the greatest stress upon this second principle.† "When the boy is put to school," says he, "in his sixth or seventh year, he should first be instructed in the German language."‡ The teachers of the lowest class are to use an A B C-book, and a manual of reading. After this, the pupil is to proceed to the study of German upon the universal method which Ratichius had devised for the learning of all languages. The text-books chosen was Luther's translation of the Bible, which was to be used for reading, extracting, arranging, and

* On the life and labors of Ratichius collectively, see "*History of Pedagogy*," ii., 10–44, and 479–489. Barnard's "*American Journal of Education*," vol. v., p. 245.

† Ratichius' method by its own nature imposed very definite limits to the application of his first principle.

‡ "*The new and desirable Ratichian method of teaching the tongues speedily and skillfully. Communicated to his friends by the author himself, but now made the property of the public for the sake of studious youth. (Desiderata methodus nova Ratichiana, linguas compendiose et artificiose discendi Ab Autore ipso amicis communicata, nunc vero in gratiam studiosae Juventutis Juris publici facta).* Halle, 1615, p. 56.

applying principles, until the whole Bible has thus been used.* At the same time, the forenoon is to be devoted to the rules of the grammar, and at other hours the letters of Luther, or of the chancellor Pontanus (Bruck) and Schurff, are to be dictated and corrected by the rules of German grammar, as a practice in writing orthographically. "When the German grammar, which is as it were an introduction to all languages, is well understood," the teacher is next to instruct them, as far as circumstances permit, in the rudiments of other studies. He is to acquaint them with the rules of logic and rhetoric "in this language." Then he is to proceed to arithmetic, then to music and geometry, until the pupil has reached his ninth year, if of average talent, and is thus well prepared for a more complete and detailed study of the sciences and the other languages. I have been somewhat fuller in these details, because they give the unprejudiced reader a correct view of both of the correct ideas of Ratichius and of his wrong-headed ones also. Much the most important and fruitful of all his conceptions was, his express declaration that the German language is that in which the elements of learning must be taught, and from which it is necessary to proceed to all the other languages.

Ratichius found a favorable hearing for his reforms from many powerful and influential persons of the time. In 1612 he laid before the Imperial Government, at the Diet at Frankfort, a memorial upon his method; Duchess Dorothea of Weimar, Prince Ludwig of Anhalt Köthen, the city councils of Frankfort and Augsburg, and the great Swedish chancellor Oxenstiern, took an active interest in the new system.† And what was for many reasons still more important, some of the most eminent learned men of the period upheld the views of Ratichius; and above all the acute and comprehensively learned Joachim Jungius, and Christopher Helvicus, one of the best scholars of the day in Hebrew and the related languages. Both these men were at first carried rather too far by their zeal for the new doctrine; but afterwards recovered from their over-estimation of Ratichius, without doing injustice to such of his views as were correct; and declared themselves distinctly in favor of the employment of the German language for learned purposes.‡ Jungius, besides his many

* The directions given in the "*Desiderata methodus*" for treating the German language, if we compare what is said of the "universal method," (p. 57), with the special directions about German (pp. 66-61), will coincide in the main with what is laid down from Kromayer, "*History of Pedagogy*," ii., p. 23, *et seq.* Barnard's "*American Journal*," vol. v., p. 234.

† For details see "*History of Pedagogy*," vol. 2. Barnard's "*Am. Journal*," vol. v., p. 250.

‡ "*Joachim Jungius and his times* (*Joachim Jungius und sein Zeitalter*)." By G. E. Guhrauer, Stuttgard and Tübingen, 1850, p. 30, 31.

other labors, occupied himself with a German grammar; and directed his efforts particularly to the object of establishing a German technical language for learning. But his scheme, like so many other similar ones, failed.* We shall however see that even in this respect, the labors of Jungius did not remain entirely without influence upon subsequent time. Helvicus, like Jungius, endeavored to clothe his own department of learning in a German garment. Unfortunately however, he was snatched away by death in 1617,† not living to see the appearance of his great work. His heirs, in accordance with his wishes, published his "*Didactic books of Universal Grammar, of Latin, Greek, Hebrew and Chaldee. Giessen*, 1619.‡ This work is nearly related to our subject; for at the same time appeared another one by Helvicus in German, entitled "*Grammar: I. Universal, including what is common to all languages; II. Latin; III. Hebrew, written in German by the late respectable and very learned Herr Christophorus Helvicus, Doctor in the Holy Scriptures, and professor in the honorable university of Giessen; and now printed for the benefit of beloved youth; with the privilege of his Roman Imperial Majesty against reprinting. Printed at Giessen by Casper Chemlin, in the year* 1619."§ The preface, signed by "the widow and children left by the deceased author," says that "The German grammar was prepared at the gracious command and ordinance of the Landgrave Ludwig of Hesse. It thus expresses the design of the work: "Heretofore, and still, it has been and is the custom in the schools to instruct tender youth who are beginning their studies, not in their native-born mother tongue, but in Latin; which is as entirely unknown to them as Arabic or Turkish; which causes great confusion, weariness and waste of labor to the dear young people. For no grown-up intelligent man, not to mention a boy just beginning, could learn well any thing taught him in a strange unknown language. To prevent such irreparable evils, our respective husband and father‖ Christophorus Helvicus, now resting in God, had set forth grammar in our German language, and in an entirely consistent harmony, with great and persevering zeal, to the injury of his health, and at no small expense."

* Guhrauer's Jungius, p. 43; p. 224, *et seq.*

† Ib., p. 44.

‡ "*Libri didactici grammaticae universalis, Latinae, Graecae, Hebraicae, Chaldaicae.*" Giessen, M.DCXIX. 4to.

§ "*Sprachkünste: I. Allgemeine, welche dasjenige, so allen Sprachen gemein ist, in sich begreifft, II. Lateinische, III. Hebraische, Teutsch beschrieben Durch Weyland den Ehrwuerdigen vnd Hochgelahrten Herren Christophorum Helvicum Der H. Schrifft Doctorem vnd bei der loblichen Universitaet Giessen Professorem. Vnd nunmehr der lieben Jugend zu gutem in Truck gegeben. Mit Roem. Kayis. Majestaet Fryheit nicht nachzutrucken Zu Giessen getruckt durch Caspar Chemlin, in Jahr, M.DCXIX.*" 4to.

‖ The widow and children sign the preface.

The general grammar in German naturally coincides in the principal points with that in Latin. It is, however, not at all a mere translation of it, but is adapted to the nature of German just as the former is to the Latin, so far as the author's knowledge admitted. The Latin terminology is translated; *nomen* is called *Naennwort, verbum Sagwort, casus Fall,* &c.; and although Helvicus would no doubt subsequently have modified many of them, still he has been by no means pedantic in their use. He retains the terms "person," "declension," and "conjugation." The chief importance of this general grammar for us, however, is its establishment on the basis of the German language. The value of some of the brief remarks of Helvicus may be indicated, for example, by those upon the conjugations;* "Conjugations differ according to the differences of languages. In German there are two: I. That which in the imperfect ends with *ete* or *te*, and in the perfect with *et;* II. That which in the imperfect changes the vowel, in the perfect ends with *en*."

To this general grammar is added a Latin one and a Hebrew one,† with separate titles, but each title containing the words "written in German."‡ A Latin grammar written in German in 1619, is a remarkable contrast to the German grammars written in Latin which we have discussed; and very few of those who have in our own times written Latin or Greek grammars in German, as Buttmann, Zumpt, and so many others, have ever reflected that to do so was once a daring undertaking.

However severely we may reprehend the errors of Ratichius and his adherents, we can not deny them the great merit of having conquered a more honorable and useful standing in the schools, for the German language; for from this time onward we shall see the Latin more and more driven out from its previous exclusive occupancy, and in its place, the German assuming a higher and higher position in the system of educational discipline.

The reason why this movement first commenced in the seventeenth century, is to be found in the history of the German language for the previous one. Before the German could fairly demand to be substituted for the Latin as a school language, it must of course have acquired a definite and universally recognized character as a written

* P. 9.

† Guhrauer (Jungius, p. 227), says "A special interest attaches to Helvich's section on the German language, which is entirely omitted by Ratich (or at least is quite left out of the copy before me, belonging to the library of the university of Breslau), and which is entitled to a place of its own in the history of the German language and grammar." If the section here referred to is a grammar of German, other than the general grammar above described by me, it is wanting in both the copies of Helvicus in the library of the university of Erlangen.

‡ "German" is "*Deutsch*" in these titles, but in the general title it is "*Teutsch*."

language. We have seen how Luther's language became predominant in virtue of these qualities, during the course of the sixteenth century. The writings of Ratichius and his associates show in innumerable places, how closely they followed Luther, and how invariably they took for granted the recognition of his language as a standard. Ratichius commences his description of the requisites of a good teacher, with the following words:* "The teacher should be of the true religion, which after the Reformation by Luther, we commonly call the Lutheran; as it is explained in the Augsburg Confession, in the "Formula of Concord," in the works of those who by comparing one part of the Scriptures with another have richly illustrated all the points of the true and correct meaning of the Holy Spirit." Luther's Bible was the principal text-book of the Ratichians, and they make constant reference to the writings and sayings of Luther.†

The Philological Societies.—The Society for Usefulness.—The Floral Orders of Pegnitz.—Harsdörffer.

The "original sin" of Germany, contemning whatever pertains to Germany and imitating whatever is foreign, was never more strongly and destructively manifested than at the period now to be spoken of. During the seventeenth century and in the beginning of the eighteenth, there seemed to be really danger that the German would become reduced to a lower class language, somewhat similar to the Esthonian of the German-Russian provinces on the Baltic; so extensively had the upper classes given themselves up to the French language and manners. If the German philological societies of the seventeenth century are considered with reference to this state of things, we shall place a high estimate on their strenuous efforts and good intentions, notwithstanding their sillinesses and extravagant estimates of themselves; and we shall at least not under estimate the results which they did actually accomplish. The same judicious prince who took such a lively interest in Ratichius, Ludwig of Anhalt Köthen, was one of the founders of the first German philological society, which was established in 1617, at Weimar, the same place where the views of Ratichius were most favorably received. This society called itself the "Society for Usefulness,"‡ and adopted as its

* *Desiderata methodus*, Halle, 1615, p. 9.

† *Desiderata methodus*, p. 6. Guhrauer, Jungius, p. 31. Johannes Girbert mentions (in his grammatical tables, more fully described hereafter), a "*Grammatica Vinariensis*," in the new method, date 1618. I have sought in vain for this grammar in several of the largest libraries of Germany. I have since been informed by Prof. Massmann, who has been for a number of years occupied in researches respecting Ratichius, that this *Grammatica Vinariensis* exists at Weimar, and was written by Kromayer.

‡ *Fruchtbringende Gesellschaft*, literally, "Fruit-producing Society."

symbol a palm-tree. The similar societies which had for a long time existed in Italy, furnished a model for these, and indeed occasioned them. The founders of the German societies set forth their purpose as being: "to establish in Germany also an association whose members should endeavor to speak and write good and pure German, and to do whatever might contribute to the elevation of the mother tongue."* This was certainly a most honorable undertaking, and at that time of great importance. But in their adherence to their Italian models, and in following the taste of their age, the members of the society fell at the very beginning into a way of trifling over names and symbols which sometimes threatened quite to smother the whole of the excellent germ of their undertaking. Each member chose a symbol, and a corresponding society name, at first selecting terms from the trades of the miller and baker, and afterwards from the whole vegetable world. Herr Kaspar von Teutleben, the principal founder of the society, called himself "The Flour-abounding" (*der Mehlreich*), and took for his symbol a sack of wheat. Prince Ludwig was called "The Nourisher;" Duke Wilhelm, of Weimar, "The Savory;" the younger prince Ludwig, of Köthen, "The Succulent," &c.† But notwithstanding these follies, we must honor princes who, in a period so troubled, devoted themselves to the best of their ability to the improvement of the German language. We shall hereafter find, in "*The Seeker*" (J. G. Schottel), and "*The Tardy*" (C. von Stieler),‡ men who applied themselves vigorously to the task of laboring upon the German language.

The Society for Usefulness, having once set the fashion, found numerous imitators during that century. A great number of similar societies arose, characterized by the same silly use of names and symbols, but some of which, notwithstanding all their extravagance, were not without usefulness. I shall refer only to one of the best known; the "Worthy Order of Shepherds and Flowers of Pegnitz."§ The founder of this society, Herr Georg Philipp Harsdörffer, an eminent patrician of Nuremberg, took the name of Strephon, and all his associates adopted similar pastoral society names. Harsdörffer had already been named "The Sportive,"‖ as a member of the Society for Usefulness; and this name very well describes the character of this

* "*History of the Society for Usefulness* (*Geschichte der Fruchtbringenden Gesellschaft*)." By F. W. Barthold, Berlin, 1808, p. 106. I can of course only refer to the subject very cursorily in this place.

† Barthold, p. 109.

‡ Reichard's "*Attempt at a history of the German Grammar* (*Versuch einer Historie der deutschen Sprachkunst*)." Hamburg, 1747, p. 301.

§ *Der löblich Hirten und Blumenorden an der Pegnitz.*

‖ "*Der Spielend.*" Barthold, p. 335.

Pegnitz Order of Shepherds and Flowers, which he founded in 1644.* But notwithstanding his acknowledged childish and tasteless traits, we find in Harsdörffer many sound and valuable thoughts. In his "*Specimen of German Philology*,"† he urges with great force the importance of the German language. He demands that youth should be taught the rudiments of their native language at the same time with those of the Latin.‡ He promises undying fame to that prince who shall first appoint in his university a professor of the German language.§ And finally, he expresses his conviction that the time will come, when the studious "can escape the monopoly possessed by the Latin, which is necessary only in the uppermost stages of the higher faculties, and can, so to speak, buy at first hand the other arts and sciences."‖ At the same time, Harsdörffer, as the limitation in the above extract shows, is far from being wrong-headed and fanatical in his preference for the German. Although he is zealous for the avoidance of all unnecessary foreign words, he still expressly affirms that such words as Testament, sacrament, prophet, apostle, evangelist, are not to be interfered with;¶ and he also expresses himself with much more moderation than many of his cotemporaries, with respect to the innovations in German orthography. The fact that Harsdörffer, notwithstanding all his correct views, accomplished but very little for the real benefit of the German language, and that his own productions are now read only as literary curiosities, may serve as a warning to us, not to place too high an estimate upon the literary value and importance of labors bestowed upon the improvement of the German language and the mode of teaching it. Harsdörffer himself and his cotemporaries afford a striking instance of the extent to which self-deception in this respect is possible. At the close of the Latin disquisitions from which the above extracts have been taken, Harsdörffer has personified the German language, proclaiming her own praises in German verses. In these he has made every effort to extol the natural capacities of the German language.

"Of sound like unto mine are all of Nature's voices,
With crackle and with gurgle each rill and stream rejoices,
And lisps along the gravel with babbling splashing tone,
That seems to laugh to scorn all tongues except my own."

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* I abbreviate the title. Those desirous of fuller information on this Order may find it in Amarante's "*Historical Account of the Origin and Progress of the Worthy Order of Shepherds and Flowers of Pegnitz* (*Historische Nachricht von des löbl. Hirten und Blumen-Ordens an der Pegnitz Anfang und Fortgang*)." Nuremberg, 1744, p. 18, *et seq.*

† "*G. Ph. Harsdörfferi Specimen Philologiae Germanicae.*" Nuremberg, 1646, pp. 96, 97.

‡ Ib., p. 92. § Ib., p. 96. ‖ Ib., p. 102. ¶ Ib., p. 238.

And so on, to the end of the chapter. The contemner of the German language is disposed of as follows:—

"For he has never read
What I have done before, what I have now been made,
And now my fair domain is strongly fenced about,
No longer now to feel the critic's foolish flout."

"Filip von Zesen," is usually quoted as a caricature of the German philological studies of the seventeenth century. And yet, even this pedantic eccentric, busy-body as he was, and driven about from one place to another, gives us an impression that, in spite of all his vanity, his intentions are good.

But in this place, we can neither stop to examine his "*Instruction in the High German*,"* and his numerous other sigular productions, nor the High German orthography of Johan Bellin and other obsolete reformers.

Christian Gueintz and Johannes Girbert.

Christian Gueintz, of Halle, stands in close connection with the labors of Ratichius on one hand, and the Society for Usefulness on the other.

As a member of that society, his title was "The Regulator (*Der Ordnend*)." In 1641, he published at Cöthen, "*Christian Gueintz's Outline of German Grammar*."† Although Gueintz was acquainted with the grammarians of the sixteenth century, Clajus‡ and Oelinger,§ still he and his eulogizers,‖ show no small pride in this new undertaking of his. One of the complimentary poems prefixed to the book says:—

"How German should be spoken, made pure, and purely writ,
This grammar doth instruct; which cometh to the day
Because our mother-tongue disused and slighted lay,
That she should thus remain all lawless was not fit."

Gueintz himself commences his preface as follows:—"Although our mother-tongue has heretofore not been studied out of books, but received as if by nature; has not been learned of teachers, but from our nurses; not in the schools, but in the cradle, after the manner of the valiant and well-born Gracchi at Rome; still, all things must have a beginning, except that faculty which God implants originally in reasonable creatures."¶ We may observe in these words the stress

* "*Hooch-Deutsche Spraach-uebung.*"
† *Christian Gueintzen, Deutscher Sprachlehre Entwurf.*" In the library at Berlin.
‡ Outline, &c., p. 63. § Ib., pp. 8, 63. ‖ Outline, fo. 1. ¶ Ib., fo. 4.

which was at that time laid upon the attempt to arrange a fixed and correctly regulated course of school studies in German. The intermediate efforts of Ratichius constitute the chief point of distinction between the grammarians of the sixteenth and those of the seventeenth century; for it is easy to see how immediately the grammar of the latter is connected with that of the former. Luther* is still uncontestedly the most authentic voucher for good German; and the imperial rescripts still preserve their ancient reputation.† Thus it strikes us as strange enough, when we find, added to these authorities, such others as "all the recent historical writers, Amadis, pastorals, the Astraea, &c., the translations from de la Serre."‡

The views of Gueintz were quite in harmony with those of the educational innovators of his day; as appears, among other things, from his singular terminology. His attempts to replace Latin expressions by German ones,§ is open to criticism only on the ground of being pushed too far. Many of these changes have been justified by time. His grammatical terminology, on the other hand, is a warning against arbitrary innovation. It is difficult to understand for instance, such a maxim as "*Der sonderbare zufal ist die völligkeit;*"‖ or the caption of the sixth chapter of the second book; "*Von der einfächtigen endannemung des Mittelwortes.*"¶

Gueintz's "*German Orthography* (*Deutsche Rechtschreibung*)," is an important work. It was "revised and published for consideration," by the Society for Usefulness; and appeared at Halle in 1645.**

Johannes Girbert of Jena,†† is like Gueintz, closely related to the labors of Ratichius. Although Girbert's principal grammatical work refers to the earlier writings of Schottelius, I shall still place my account of him before that of the latter, partly because Schottelius' principal work appeared after Girbert's and partly because Girbert adhered closely to the methods of the earlier grammarians. Like most of them, his first object is, a determination of the subject of orthography. His book appeared under the title, "*German orthography from the Holy Bible, set forth for the instruction of boys, by Johann Girbert, rector of the gymnasium at Mulhausen. Mulhausen, printed by Joh. Huter*, 1650." Fol.‡‡ His mode of handling his subject is peculiar. In his preface he inquires from what sources

* Outline, pp., 4, 6.

† "*German orthography* (*Deutsches Rechtschreibung*)." Halle, 1645, p. 4.

‡ Outline, &c., p. 7.

§ See the list, "Outline," &c., p. 122, *et seq.*

‖ Outline, p. 11.

¶ Ib., p. 106.

** In the Berlin library, where are also editions of 1666 and 1684, both at Halle.

†† Girbert calls himself *Jenensis*, in the title to his "*Logica*," (Coburg, 1632. fo. 1).

‡‡ "*Teutsche Orthographi Auss der H. Bibel den Knaben zum Nachricht auffgesetzt von Johanne Girberto Gym. Mulhusini Rectore. Mulhusi Typhis, Joh. Huteri, Anno*, 1650."

youth should be taught German orthography. "Should it be," he asks "from the Amadis, the pastorals, Jest and Earnest, Sir Pontus or Sir Gallinus, The Prison of Love, and the like?" This idea he combats with all his might. The young, he says, "look in such books for good and correct language; and find instead, abominable stuff." "They will therefore proceed on a much safer plan by having recourse to the Holy Bible." To this end, Girbert gives a large number of words whose orthography needs to be taught correctly, alphabetically arranged, and each having a verse from Luther's Bible given with it, in which it occurs.

This pioneer work was soon followed by Girbert's principal one, "*The German grammar or art of speech; compiled with the aid of the grammars heretofore printed, especially those of Johann Claius, Hertzberg, 1587; Weimar, after the new method, 1618; Christ. Gueintz, Halle, 1641, March 24; Justus Georg Schottelius, 1641, July 6; arranged in brief tables, and published in compliance with many solicitations, by Johann Girbert, gymnasiarch pro tempore. In the Holy Roman Imperial city of Mulhausen in Dueringen, 1653. With privilege from the Elector of Saxony. Printed by Johann Hüter. Grammar is the beginning and foundation of all arts.*"* Such is the long title of this small folio volume. Around it, in a separate border, are printed the words, "If our youth are well instructed in the noble and perfect German tongue, they will the more easily attain to the knowledge of the others."

All this indicates clearly enough views similar to those of Ratich, even to the characteristic fondness for tables. Girbert sets forth the whole of German grammar in seventy-eight detailed tables. Many things in these are very well, and others are singular enough. Thus, for instance, Table LXXIII, treats of "variations in arranging words." Here we are taught "how one sentence can be expressed in many different ways." As an illustration of the method given, one may take an example from Luke, xvi.; "The rich man died also." The book proceeds to say, "This might be expressed by a German, a poet especially, in other ways, with a nominative; as, 'The rich man also laid down the tabernacle of the flesh,' or 'was obliged to leave this earth.'" Thus the sentence is tortured through thirty-four examples,

* "*Die Deutsche Grammatica oder Sprachkunst, auss Denen bey dieser Zeit gedruckten Grammaticis, vornemlichen Johann's Clai, Hertzb. Anno, 1587. Vinariensis zum neuen Methodo. Anno, 1618. Christ. Gueintzii, R. Hal., Anno, 1641. 24 Mart. Justi Georg Schottelii, Anno, 1641, 6 Jul. Zusammen getragen, in kurtze Tabellen eingeschrenkt, vnd Dem veffentlichen Liecht endlichen uff mehrmahliches Anhalten vbergeben von Johanne Girberto Gymnasiarchâ, p. t. In des Heil. Roem. Reichs Stadt Murihausen in Dueringen, Anno, 1653. Vnter Churfurstl. Sachs. Privilegio. Typis Johannis Hviteri. Grammatica ist der Anfang vnd Grund aller Kuenste.*"

for the six cases, until it is dismissed at the ablative with these variations: "The worms also ate their fill of the rich man,—The devils have had a good soup off the rich man in hell since he died." It is clear enough that there was sometimes at that day, not only method in their madness, but often also madness in their methods.

Schottelius.

The most valuable member of the Society for Usefulness, in the matter of investigating the German language, was Justus Georgius Schottelius.* He was born at Einbeck, in the then kingdom of Hanover, attended school at Hildesheim and Hamburg, studied law at Leyden, and at the same time applied himself to belles-lettres under the guidance of Daniel Heinsius. In 1638, Duke August of Wolfenbüttel, appointed him tutor to his son Anton Ulrich; and under the patronage of the patriotic and learned duke, the collector of the great Wolfenbüttel Library, Schottelius now rose from one place of honor to another. In 1645, he was made consistorial councilor; in 1646, councilor at Wolfenbüttel; and subsequently privy councilor in chancery, and of justice. He was variously employed in important affairs by his prince, and remained in high favor with him until his death, in 1676.†

In the Society for Usefulness, of which he became a member in 1642, he received the title of "The Seeker."‡ Schottelius belonged to that band of honorable men who in the midst of the greatest affliction of the German father-land, never ceased to cherish the idea of her greatness and splendor; and who endeavored to find in the elevation and improvement of the German language, some compensation for the political disgrace of their century. But while others were contenting themselves with merely praising the German language, Schottelius applied himself with most commendable industry to the improvement of its grammar. The fact that he devoted such leisure as was left him by a life of exacting duties, to such a painful labor, alone entitles him to high praise. Of the various grammatical works of Schottelius, we will at present consider particularly only two, one as being the most important of his productions, and the other on account of its value for our purpose, as having a connection with the schools. Schottelius, after having at several times published the results of his labors on German grammar,§ collected together all

* I print the name in the form used by Schottelius himself in the titles of his books.

† Reichard's "*Attempt at a history of the German Grammar*," p. 127, *et seq.*

‡ Barthold. p. 327.

§ "*German grammar. In three books (Teutsche Sprachkunst. Abgetheilet in Drey Bücher).*" Brunswick, 1641, 8vo. "*Introduction to the German language (Der Teutschen Sprach Einleitung).*" Lübeck, 1643, 8vo. "*German grammar, published for the second*

the treasures of his learning on the subject in the work of which the following is the somewhat long, but characteristic title:—

"Complete system of the proper German tongue; in which are included accounts of its origin, antiquity, purity, peculiarities, richness, incomparability, correctness, also therewith fully set forth, the grammar and prosody of the German, and in good part of the Latin; and likewise the reduplications, derivations, and introduction to the language; authors on German manners and German language; of translation into German; also, the root words of the German language, with their explanations, and many similar important matters. Divided into five books. By Justus-Georgius Schottelius, Court and Consistorial Councilor of Brunswick and Lüneburg, and Assessor of the High Court of Justice. Not only with privilege from his Imperial Roman Majesty, but also with the special imperial approbation, as a work of general utility and eminent benefit to the German nation, as by the tenor of the Imperial Privilege here following. Brunswick, printed and sold by Christoff Friederich Zilligern, bookseller, M.DC.LXIII."*†

The book is a stout quarto, of which the foregoing long title also gives the contents; except that they are almost still more a mixed compilation from both new and old books, than the title is. Of its five books, the first contains ten "Eulogies of the original German language;" the second, etymology; the third, syntax; the fourth, prosody; the fifth, seven different treatises, of which the most important are, one on German proverbs, and one on "Authors who have written on German history, nationality and language." The text of the book is German and Latin, but so arranged as rather to be supplementary to each other than to interfere with each other. The somewhat heterogeneous appearance of the book will the more easily be excused when we remember that its industrious author could devote to it only such leisure hours as his business left him.

Schottelius differs from the grammarians of the sixteenth century, in that he not only endeavors to subject the language of his day to rules, but that at the same time he includes within the field of his labors, the history of the German language. Here as elsewhere his work is not free from confusion; but he can not justly be refused

time in 1651 (*Teutsche Sprachkunst Zum anderen mahle herausgegeben im Jahr*, 1651)," Brunswick. (The engraved title page which precedes the above has "Printed the second time at the princely residence of Wolfenbüttel, 1651. For sale at Brunswick," &c). 8vo. All these are in the library at Berlin.

* See the privilege itself, an interesting document, on fo. 8.

† "*Ausführliche Arbeit Von der Teutschen Haubt Sprache, . . . Ausgefertigt von Justo-Georgio Schottelio, . . . Braunschweig, . . . Christoff Friederich Zilligern, Buchhändler, Anno, M.DC.LXIII.*"

some merit. He divides the history of the German language into five epochs. The first begins with the first beginning of the language, the second with Charlemagne, the third with Rudolph von Hapsburg, "The fourth epoch will coincide with Herr Luther, who implanted in the German language all its beauty, ornament, impetuousness and exciting thunder, relieved it of many of its rugged inelegancies, and proved to the Germans what their language was capable of, if they should so resolve. And this testimony to Luther is borne both by those who like him and those who do not; and must still be given by every one, whether he hate him or love him, in that particular of the exemplification of the German language; and may be drawn from observing how the German language has grown and become polished and enriched; as clearly appears from the writings of all kinds which are every year appearing." Schottelius' definition of the fifth epoch is very remarkable. It shows, on one hand, as do the last words of the extract just given, an excessively high estimate of his own period, but on the other hand, that Schottelius had an entirely correct appreciation of the powerful movement which was carrying him onwards, and whose permanent effects we ourselves see before our eyes at the present day. "The fifth and last period," he says, "may correspond with the years during which the German language was freed from the corrupting practice of botching the language with ragged foreign terms, and restored to its native purity, beauty and chastity; when also correct and thorough principles and a method have been laid down for it, and have gained favor; and when a complete dictionary has been prepared, by whose aid all can commodiously read and understand, the arts and sciences in their native tongue, and hear them spoken of."* While the German language as presented by Schottelius, notwithstanding the improvements just alluded to, is substantially the New High German of Luther, Schottelius still proves himself acquainted with his predecessor in the field of German grammar. He calls Ickelsamer's grammar "a good little book, but somewhat too old;"† and he knows Laurentius Albertus,‡ Oelinger,§ and Johannes Clajus.‖ He is closely related to the followers of Ratichius, as a pupil of Joachim Jungius at Hamburg;¶ and his coincidences with Gueintz are numerous. Thus far, therefore, Schottelius is to be considered as standing upon the shoulders of his predecessors. The most important part of the work of definitely fixing the New High German written language, had been already done by the end of the sixteenth century. But when this task had been accomplished, there

* Complete System, p. 49. † Ib., p. 19. ‡ Ib. pp. 4, 21.
§ Ib., p. 4. ‖ Ib., p. 4. ¶ Guhrauer, Jungius, p. 226.

was still wanting an accurate knowledge of the relation between the written and oral language. Approaches to this knowledge were to be made, however, by the more detailed adjustment of the written language, the decision of what was to constitute correctness and incorrectness in it, and the preparation of a more finished system of its grammar. On these subjects we find in Schottelius valuable suggestions. He has a clear perception of the fact that he is writing a grammar of the "High German language;" and that this "language" is not a mere dialect.* "The High German language" he says, "of which we are treating, and to which this book relates, is not a dialect, but the German language itself, as learned, wise, and skillful men have received and are now using it."† He expresses himself most vigorously in opposition to the assumption of the people of Meissen. "It is also," he says, "almost ridiculous to see one and another person, especially if he comes from Meissen, fancying himself entitled to be a judge and corrector of the High German language on account of his own dialect."‡ Schottelius perceives clearly and correctly, that the practical office of a grammar of the High German is precisely such as was that of the Greek and Latin grammarians, in maintaining the authority of the Attic and classical Latin, against the dialects. With reference to this point, he enters into the celebrated controversy of the ancient grammarians on analogy and anomaly; selecting for himself a man between the two, but with a decided preference for analogy.§ On all these subjects, Schottelius is entitled to the credit of speaking and deciding with learning and judgment. But this makes us only the more disinclined to follow him at times when he entirely mistakes the real character of the language, and estimates far above their real value the labors of himself and his cotemporaries for the "radical correctness" of it. There is much truth in his remarks on the harm which he describes as having happened to the German language from "the uncontrolled, irregular and unconsidered uncertainty" of the German language, "so that up to this time it has never been able to fix upon any complete and recognized standard, as other languages have.‖ But we feel an equal degree of displeasure where he speaks, just afterwards, with profound contempt of the "vulgar usage," and says that "the vulgar usages of language are taught even from the cradle, and come as it were of themselves; but the proper language is learned only by learned directions and the exercise of industry and reflection."¶ For such reasons, the estab-

* Complete System, dedication to Duke August. † Ib., p. 174.

‡ Ib., p. 158. The remarks subsequent to this are also very worthy of attention.

§ Ib., pp. 10, 11. ‖ Ib., p. 167.

¶ The allusion in these remarks to a saying of the Romans may perhaps modify its harsh-

lishment of the Society for Usefulness seemed to him far the most important epoch in the whole history of the German language. "The German language," he says in his address to Ludwig of Anhalt, "has only ascended in its rightful honorable road to an established and perfect state, since your princely grace first prepared, in a princely and most praiseworthy manner, the golden steps for such a career, for this most magnificent, rich, and perfect language."*

In his large work, of which we have hitherto been speaking, Schottelius had complained that the young were so little instructed in German. "But," he remarks, "the scantiness of the instruction which the young receive in it, and their consequent lack of skill in it, and of power to use their native language purely and correctly in the description of excellent, skillful or remarkable things, or to enjoy, praise and understand such skillful or useful things, sciences or virtues as are written in it, is a matter which needs not statement, but rather lamentation."† This same fact was experimentally ascertained by Schottelius' friend, Prof. Christoph Schrader of Helmstadt, general inspector of all the schools in the duchy of Brunswick. He writes to Schottelius, under date of 18th of June, 1676, with expressions of great pleasure at seeing that the latter has at last begun the work which he (Schrader) had so long been begging him to undertake; and saying that in the course of his inspection of the classical schools, he was every year observing that the written tasks of the pupils contained almost more offences against the German language than against the Latin. He therefore most earnestly thanks his friend for having undertaken in the midst of his important occupations, to attempt a remedy for this evil. He proposes during his subsequent circuits, to strongly recommend this new product of Schottelius' intellect and acuteness, to all teachers and pupils. For he entertains a fixed hope that at some future day, the pupils in the schools, however industriously they study Latin orthography, will devote themselves with equal energy to that of the German.‡ In the same year, 1676, appeared at Brunswick, "*A short and fundamental introduction to orthography and etymology in the German language. Necessary and use-*

ness. What is correct in them should not be undervalued. It is their extreme opinions which constitute their error.

* Complete System, p. 1000. The work of Schottelius shows abundant evidence of the extent to which the interests of grammatical investigation suffered from the effects of such perverted views. He includes the strong verbs among the irregular ones, and gives them in his large work (pp. 578-603), alphabetically arranged. Even in the smaller edition (of 1676), he says, "Thus, the irregular German verbs can not be reduced under any certain rules, but must each be learned separately." (P. 159).

† Complete System, fo. 7.

‡ See Schrader's Latin letter prefixed to the smaller work of Schottelius, published 1676.

ful for youth in school and elsewhere."* The name of Schottelius is not mentioned in the title; but the matter of the volume sufficiently proves him to have been the author.† This little work deals chiefly with orthography, including however in this idea, correctness in declining and conjugating; and it draws from the author's larger work whatever is most necessary for practical use. To mention the particulars of what it contains would occupy too much space. I can only observe that one especial chapter, the fifth, contains an alphabetical list of words, "respecting which some doubt or error is liable to arise, either in respect to the sound, or the gender, or the article, or some other grammatical concord." In this place we find a very great number of orthographical distinctions yet prevailing, clearly set forth; such as *dass* (conj.) and *das* (pron.); *Mann* (man, husband) and *man* (they, in "they say."‡) The same correspondence with modern usage is found in many of Schottelius' rules. While therefore this author is very often only a collector of rules which were recognized before his day, still we must accord to him the credit of having exercised no small influence upon the more definite determination of the High German orthography. But how small is the assistance which this merit alone can give to the progress of the language, appears, in spite of himself, from Schottelius' own testimony, in the following citation from the preface to the "Introduction":§—

"As to the requisites of Poesy, or the art of poetry, or the art of rhyming, it is abundantly and clearly evident in the German language, what it is that constitutes regulated metrical composition and good German rhymes; and what should and must constitute them. In like manner, whatever regards the art of speaking or rhetoric, is now well and universally set forth throughout all Germany, and testified to by all the multitude of writings, letters and decrees issued and proclaimed from the imperial, electoral, princely and other well organized chanceries (including the numerous well-printed books); and by all their abundance, materials, transactions, circumstances and history; showing how the art of using correctly the beautiful and incomparable High German language is known throughout the whole

* The original title is repeated in German, viz: "*Brevis et fundamentalis Manuductio ad Orthographiam et Etymologiam in Lingua Germanica. Kurtze und gründliche Anleitung zu der Recht Schreibung Und zu der Wort Forschung In der Teutschen Sprache. Für die Jugend in den Schulen, und sonst überall nützlich und dienlich.*"

† In my copy, there is the superfluous evidence of the word "Schottelii," written in an ancient hand upon the title page.

‡ Compare the opposite direction given in the orthography of Gueintz (Halle, 1645), pp. 47, 48; and the repetition of it (making *das* [conj.] and *das* [pron.] written alike), in the edition of Halle, 1684, pp. 47–8.

§ This opinion of the historian is based in part on traits in the quaint antique German style of Schottelius, which are necessarily lost in the English.—(*Translator*)

empire; and showing also how much of ornament, skill, power, and elegance, and also how much thunder and lightning there is in the German tongue, if there is only forthcoming a hand or a tongue which is able to develop these and set them forth."

Both the form and the substance of this extract sufficiently show that even the most genuinely respectable grammatical zeal will deceive itself about its own powers, if it attributes the prosperity of a language or a literature to its own labors. But I would also remind such as may be inclined to sneer at the oddities of this "phrase of the period of the Holy Roman Empire in the German nation,"* so much despised, was nevertheless infinitely preferable to the most elaborately adorned of the French idioms which many German statesmen would substitute for it.

Stieler.

Caspar von Stieler, born at Erfurt in 1632, led a very changeful life. First a physician, then a theologian, then a military officer, then a privy secretary and court-councilor, he finally retired to private life and devoted himself to authorship. The Society for Usefulness elected him a member in 1668, and gave him the surname of "The Spade." In 1705 the emperor Joseph conferred nobility on him and his descendants. His last years were passed at Erfurt, where he died in 1707.† Stieler's chief production is his "*Treasury of the German language*,"‡ which he published under his surname of "Tardy" at Nuremberg, in 1691. To this he subjoined a "Brief manual of the High German grammar." As Stieler has followed Schottelius in his principal doctrines, although with independent opinions of his own, I may discuss the work with brevity. His opinion on the relation between the written and spoken language are similar to those of Schottelius; although his mode of defining this relation is worth mentioning. In his address to elector Johann Georg of Saxony, to whom, along with Duke Anton Ulrich, of Brunswick, his "Treasury" is dedicated, he alludes to the cities of electoral Saxony "in which the High German language was auspiciously born, auspiciously brought up, and most auspiciously adorned and ornamented, and is even now daily receiving a renewed and increasingly beautiful polish; I mean, magnificent Dresden, sacred Wittenberg, and that sweetest of all cities, Leipzig, which from its sugary treasure of language imparts such a mollifying influence to the otherwise salty Halle, that it will

* In the German one sesquipedalian word, viz., "*Heiligenrömischenreichsteutschernationsperioden.*"—(*Translator.*)

† Reichard's "*Attempt at a history of German grammar*," p. 299.

‡ "*Teutscher Sprachschatz.*"

never have cause to be ashamed of its pupils." "These excellent cities are therefore the standard of authority for the High German language; just as Wittenberg, in particular, one hundred and seventy years ago, laid the foundation of this state of things, by the translation into German of that great book of God, the Bible."* But on the other hand, Stieler declares in his subjoined manual, with a citation of Schottelius, that the High German is not a dialect at all; since all the dialects, including even the Meissian, are not this High German, but contain erroneous variations from it.† "Therefore we set forth the German language in this book, not at all as a Germar dialect, but as a proper language, authoritative throughout the empire; just as heretofore was the case with the authoritative Greek language, which is not to be confused with its subordinate dialects, neither Attic nor Doric, nor Æolic nor Ionic; or as the Latin language was spoken and written within the country of Latium; or as is now the case with the French‡ court dialect, called '*la langve de la cour.*'"

Morhof.

Daniel Georg Morhof, the well-known "Polyhistor," (born at Wismar, 1639, and died at Lübeck, 1691,) holds an important place in the history of instruction in German. He was the first to endeavor to make the history of German poetry a department of school instruction; an undertaking rendered more important by his adding to it a history of the later German poetry. The book in which this task was performed bears the title "*Daniel Georg Morhof's instruction in the German language and poetry, their origin, progress, and rules. Wherein are treated also, the rhymed poetry of foreign nations, and other matters.*"§

In this book, Morhof connects himself on one hand with the important work of Martin Opitz on German poetry, which appeared in 1624, and exerted a lasting influence on all who came after him. And on the other hand, he was a precursor of the labors by which Gottsched exercised so great an influence upon his cotemporaries. Indeed, how uncouth and rude soever some of Morhof's opinions may appear, his work must still be allowed to contain the first rudiments

* Fo. 3, 4.

† The passage from which I quote is made unintelligible in the original by an error of the press. The point after "Meissnisch" must be erased.

‡ "*Franßöische*" in the original. See the article "*Franßöisch, und Franßösisch*," in the "Treasury."

§ "*Daniel Georg Morhofen Unterricht Von Der Teutschen Sprache und Poesie, deren Uhrsprung, Fortgang und Lehrsätzen. Wobey auch von der reimenden Poeterey der Ausländer mit mehren gehandelt wird.*" Kiel, 1682. I use the copy from the Berlin Library.

of the system afterwards carried to such perfection by Herder and his followers.

Morhof's book consists of three parts. The first treats of "The German language," its excellence, antiquity, derivation, &c. The second discusses "The origin and progress of German poetry." This is much the most important part of the whole book. In it, Morhof first gives accounts of the poetry of foreign nations, the French, Italians, Spanish, English, and Dutch. The French, he respects and over-values. "We begin," he says, "with the French; which nation may justly be preferred over others for intellect, and capacity for poetry."* He however expresses independent opinions about the poetry of other nations. But aside from this, the mere possession of so much information of the European poetry of that day gives Morhof's book an important value. Morhof is the first author, so far as is known, who mentioned the name of Shakspeare in Germany; and his reference to the greatest modern dramatist is sufficiently curious. "John Dryden," says Morhof, "has written on dramatic poetry well and learnedly. The English authors whom he quotes under this head are Shakspeare, Fletcher, Beaumont; of whose works I have seen none."† Morhof follows his account of foreign poetry with the history of that of Germany, from its earliest beginning down to his own times. This he divides into three periods. The first, includes all before Charlemagne; the second, from Charlemagne to the beginning of the seventeenth century; the third, begins with Martin Opitz; "because under the guidance of Herr Opitz, German poetry awakened again as it were out of the grave, and assumed much more splendor than before."‡

The third principal division of Morhof's book treats of "German poetry in itself considered;" and here he introduces some account of the usual chief subjects of grammatical works, orthography, etymology, and syntax, proceeding to things more strictly poetical; such as rhyme, invention, epics, odes, &c.

Bödiker.

Johann Bödiker, who was born in 1641, and who was, from 1673 until his death in 1695, conrector and afterwards rector of the Cöln Gymnasium at Berlin, published in 1690, a German-school grammar, with the title "*Principles of the German language in speaking and writing.*"§ The book deservedly met with great success, especially

* P. 154. † P. 250. ‡ P. 422.

§ "*Grund-Sätze Der Deutschen Sprachen Inn Reden und Schreiben.*" I have used the 3d edition, Berlin, 1,709, 8vo.; which, Reichard says (p. 288) is unchanged, except § 69.

in consequence of the author's historical researches. He follows Schottelius in many matters.* But his book is fuller than the small outline of Schottelius, and much more convenient than his larger work. His rules are mostly short and practical. He gives the High German the same precedence over the dialects, which Schottelius had allowed it. But the superstition about the Misnian dialect was even then very firmly fixed, as appears from his observation, (p. 211,) that "The Misnians and Upper Saxons come next to it (the High German) in purity of expression." But he says, again, on (p. 212,) "One born a Low Saxon, Marker, Pomeranian, Westphalian, Brunswicker, &c., can speak High German with purity better than those of Upper Germany." Bödiker lays special stress on syntax; saying expressly, "Syntax is the principal part of grammar."† His estimate of the German language is very high. He values it above the Greek and Latin,‡ because it is "fuller, stronger and richer."§ The other nations of Europe will scarcely agree with the letter of our grammarian's assurance that "In the last century it (viz., the German language) first assumed a proper condition; and during the present century (the seventeenth, that is,) it has been carried to the highest pitch of elegance."‖ Bödiker has the utmost respect for Luther's style, however; considering it superior to all others. In recommending the reading of good German books, he urges the study of Luther, above all, upon the young. I will quote the leading sentences from the paragraph on this subject, as they are important for other reasons.¶ The passage begins, "In order to acquire a good style of reading and speaking German, it is necessary to read good German books." And the author then proceeds, in explanation, to add, "That is, those written in good, old, true, sound, strong German. And especially, as has been already said,** the German Bible is valuable for this purpose, besides innumerable other benefits. And furthermore, the writings of Herr Luther. The Imperial decrees. The observations of Goldast and of Londorf."†† I will cite further only the following: "The good German poets will all also contribute their aid. But it is proper that youth should be warned against the fantastic dreams of

* See for instance, p. 95, *et seq.*, on regular and irregular conjugation. We find, again, on the other hand, at p. 30, the present rule given for initial capital letters; in contradiction of Schottelius' Introduction, p. 30. Bödiker, (p. I,) calls Schottelius his predecessor.

† P. 217, Bödiker uses "*Wortfügung*" for "syntax," like Schottelius, (Complete System, pp. 691–2, *et seq.*)

‡ P. 417. § P. 418. ‖ P. 415. ¶ P. 411.

** Referring to p. 40, where he says of Luther's Bible, "But there is no better book among those in the possession of the Germans, than the German Bible, in the translation of that deceased man of God, Herr Luther. This is a treasure above all treasures; and few nations possess a book so pure, clear, strong, wise, powerful and moving."

†† Compare what has been said before of Luther and the imperial decrees.

amorous composition, and should avoid them like poisonous herbs. Especially should Amadis, and such corrupting writings, be avoided. As to romances, I shall shortly speak of them, in the section on prosody.* I should not so frequently refer to the writings of Herr Luther if I had not found his German style better than that of any one else; not to mention, besides his language, his excellent Christian and edifying matter. The young may well consider what that excellent historian Sleidan has said to his praise in this particular: 'He both very much adorned and enriched the German language, and attained the highest reputation as a writer in it.'"

That the excellent old German rector not only recommended the study of Luther to others, but also disciplined himself in it, the reader will readily gather from the plain significant style of the few extracts which I have given, if he will compare them with those from Schottelius and Stieler.

Johann Leonhard Frisch.

After Bödiker comes another Berlin rector, undoubtedly one of the most important of those who have devoted their talents to the investigation of the German language. Johann Leonhard Frisch was born in 1666, at Sulzbach, in the Upper Palatinate, attended school at Nuremberg, studied theology at Altorf, Jena, and Strasburg, and afterwards lived an adventurous life of travel through Germany, France, Italy, Hungary, Turkey, and Holland, until he was appointed, in 1698, sub-rector at the gymnasium of the Grey Friars' monastery at Berlin. In 1706, he was chosen on the recommendation of Leibnitz, whom he had instructed in Russian, member of the Royal Prussian Academy of Sciences, and, in 1726, rector of the gymnasium at Berlin. He died at an advanced age, in 1743.† Frisch was a man of a very different grade from most of those whom we have thus far mentioned. His learning in German philology was incomparably more thorough than that of Schottelius; and is especially distinguished by having labored most zealously throughout a long life in grammar and lexicology, without losing his intellectual freedom, or falling into pedantic

* I can not resist the temptation to subjoin at least the beginning of the passage here referred to. On reading romances, we find a paragraph, (p. 484,) with the heading, "Romances do the young more harm than good." The commentary which follows begins thus: "Romances have never pleased me. They are an abortion, brought forth by France, as was Amadis by Spain. There is no poetry, and no true history, in them. Incredible and impossible deeds are ascribed to their knights, and their women in knights' costume. Moreover, they must of course all be lovers; and they bring many licentious tricks to market. Then, their travels are all so confused together, as if it were always summer in all countries. The knights can talk with everybody in every country, in all languages, without any interpreter," &c.

† I take these notices from J. J. Wippel's life of Frisch, Berlin, 1744, 8vo.; and regret that I am unable to devote more space to the life of this remarkable and useful man, who applied himself with equal zeal to natural and philological science.

habits. His great work in his German-Latin dictionary, which appeared at Berlin in 1741, in two volumes large quarto, far surpassing all previous works of its kind. Our attention is however at present due more especially to Frisch's labors for German grammar for schools. I do not mean that the results of these labors were particularly extensive in his own day; but that it is remarkable to find the best philologist of his time entertaining views so sound, so wise, and still so liberal, in the best sense of the word, on the subject of school grammar. In 1723, Frisch published a new edition of Bödiker's grammar, already mentioned. Its title was:—"*The principles of the German language, by Johannes Bödiker, rector of the Cologne Gynasium at Berlin; republished for the most part, and improved and enlarged with quite new remarks, and a full register of such words in the German Bible as require some explanation; also with an appendix, containing an outline and specimen of an authoritative German dictionary; by Joh. Leonh. Frisch. Berlin, Christoph Gottlieb Nicolai*, 1723."* This title would indicate, at a glance, no very great undertaking. But upon a careful examination of the paragraphs, the matter will be found very frequently to be entirely new. Frisch is therefore justified in saying in his preface, "that it was intended to preserve a monument to the memory of the deceased author; for that the material of the books are such that they might well have been published under an entirely new title."† Frisch's principal subject, as with all his predecessors, is German orthography. This department of grammar, broadly considered, enters into all the other departments; and especially, it often obliges us to decide the question what is or is not to be considered as belonging to the written High German dialect. Frisch very much abridges Bödiker's explanations on this head; omitting what I have quoted from the latter on the Misnian and Low German dialects, and defining the High German as follows:—"The High German language is not the peculiar dialect of any one race or nation of the Germans, but has grown to its present perfection out of all those dialects, by the industry of learned men, and from the style adopted by the writings of learned men and by the oral usage of many eminent persons, throughout Germany."‡

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* "*Johannis Bödikeri, P. Gymn. Suevo-Colon. Rect. Grund-Sätze der Teutschen Sprache Meistens mit Ganz andern Anmerkungen und einem völligern Register der Wörter die in der Teutschen Uebersetzung der Bibel einige Erläuterung erfordern Auch zum Anhange mit einem Entwurff und Muster eines Teutschen Haupt-Wörter-Buchs Verbessert und vermehrt von Joh. Leonh. Frisch. Berlin, Verlegts Christoph Gottlieb Nicolai, MDCCXXIII.*"

† Preface, fo. 3.

‡ P. 275. The former part of the extract is Bödiker's, the latter Frisch's.

Frisch's position on the subject of orthography is as strongly opposed to the superfluities and ignorance of the innovators of his time, as to the pedantic champions of the obsolete methods. He is especially earnest in insisting that thorough historical knowledge is necessary to deal with the subject. "Any one," he says, "who has not an adequate collection of such materials* . . . should refrain from handling the subject; for he will be sure to be ranked among those unlucky philological quacks of whom a long catalogue might already be made out. For every sorry writing-master who has barely mastered calligraphy, must needs give rules for orthography; not to mention others, etymologists with privately interested motives, and vain self-appointed popes in language."† Improvements in language must be made slowly, and with caution and thorough knowledge. "One who undertakes alone to carry this point by storm," he says in another place,‡ "will be shamefully repelled by those very numerous persons who either can not or will not depart from the old beaten track. And those who would proceed by storm commonly introduce by their ignorance ten faults where they detect one. Mining is the proper mode of assault; and the best place for doing this is in the large schools; where persons of all ranks may be so trained up that they will take more pleasure in aiding to introduce a reasonable usage than to help maintain an unreasonable old one. It will suffice at first to instill a degree of indifference to pedantic writing-master's rules, and to diminish the burden which they have laid upon the young and unlearned." But it would be a mistake to suppose that Frisch argues here in favor of arbitrary changes. "Orthography," he says,§ "is the noblest pillar of any language; and therefore of the German." Such is the tenor of one of his paragraphs; and in a very carefully considered further statement of the idea he says, "The basis of this pillar is commonly the principle that the spoken sound is the rule; we must write as we speak. But because there are so many different German dialects, many of the German foundation-makers have fallen into error by concluding, each that the dialect to which he has been accustomed from birth is the only correct one. If every one were to proceed on this principle, and write as he speaks, there would be as many daughter-languages, even in the writing, as there are countries and cities in Germany. A general rule for written language has therefore been sought; and has resulted in that German language called the High German. All intelligent people

* That is, "thorough treaties on etymology, analogy, or other philological subjects, by whose means a language may be reduced to rule or illustrated."

† P. 40. ‡ Preface, fo. 4. § P. 33.

maintain that this is the authoritative language; and prevent and avoid all introduction of the so-called dialects."

General View of the Instruction in German, in the Seventeeth Century and first half of the Eighteenth.

The account which I have given of the German grammarians of the seventeenth and eighteenth centuries, is so drawn up that the reader can represent for himself the mode of giving instruction in German which prevailed in the schools during that period. As I began the present chapter, however, with a comprehensive retrospect of the sixteenth century, I will close it with a survey of the progress of the subsequent century and a half. At the beginning of the seventeenth century, the problem to be solved during the approaching period was already shadowed forth by Ratichius and his followers. This was, the establishment of the German language, in its proper and important place in the institutions of classical learning as well as elsewhere; and also as an organ of communication—in part at least—instead of the Latin. We find a great variety of attempts in this direction during the seventeenth century. Helvicus undertook to treat general, Latin and Hebrew grammar, in the German language. Harsdörffer, Schottelius, and many others, insisted upon the importance of instruction in German; and foretold the time when all learning should assume a German garb. The works of these authors on German grammar, especially on orthography, are in part rude and pedantic. They however fulfilled the demands of their day upon them; to establish in all its details as a written language, the High German, handed down to them by the sixteenth century in a state of substantial completion. The task of the seventeenth century in this department was not that of creative genius, like that of Luther, or of Lessing, Goethe, and their cotemporaries, two or three hundred years later; it was one of labor and drilling, painful, wearisome, often vain, but on the whole thorough and efficient.* The individual champions of this movement often make a disagreeable and sometime even ridiculous impression upon us, by their pedantic and inelegant forms of thought and expression; and their writings are frequently the more distasteful, not only because they have themselves only half escaped from the Latin straight-jacket which they are trying to ged rid of, but also because they are often contaminated by the foreign French phrases which were just coming in, and against which likewise they fought manfully, according to their knowledge.

And here also we come upon a singular phenomenon, viz., that the

* Compare the position occupied by Opitz in the department of German poetry.

Germans, in order to rid themselves of an old and obsolete state of things, applied themselves to a foreign nation of the Romance race, and who had already long before taken exactly the steps which they were themselves endeavoring to take.* There is a striking instance of this in the case of one of the advocates of the establishment of German as the language of schools and learning—Johann Balthasar Schuppius, who died 1661. "Wisdom," Schuppius observes, "is not bound up in any one language; why should I not be able to learn to know, love and honor God in the German language, as well as in the Latin? Why should I not learn how I can aid a sick person in German, as well as in Greek or Arabic? The French and Italians teach and learn all the faculties and liberal arts in their native language. There is many a cardinal and many a great prelate in Italy, who can not speak Latin."† The stout German nature of the worthy Schuppius preserved him from adopting much that was French; but these remarks of his may serve to explain many phenomena which at first seem in themselves contradictory. It was the splendor of the French court and the politics of Louis XIV., which seduced the German nobility into their miserable surrender to French fashions; but it was the fact, already alluded to, that the French had preceded us in the installing of their native language in its just rights, which betrayed the greatest German philosophers of the seventeenth century, and the greatest German princes of the eighteenth, into the adoption of the French language. Leibnitz, however, although he wrote his principal philosophical works in French, was the best exponent of these labors in behalf of the German language which characterize his century. To prove this assertion, however, I should be obliged to transcribe the whole of his "*Humble suggestions respecting the practice and improvement of the German language.*"‡ When Christian Thomasius, in 1687, announced at Leipzig the first university course of lectures in German, he did so by means of a printed "Discourse, upon the fashion in which it is proper to imitate the French in ordinary life and conduct;" which he fastened upon the blackboard as his programme for the course. But after the accounts which I have given, the contents of this programme will not appear very remarkable to my reader, nor will he consider the action of Thomasius a surprisingly bold one, however great its importance may have been.

* See above, p. 398, on Aventinus, and also, more particularly, below, in the section on Gottsched.

† "The German Teacher," in the "*Instructive writings* (*Lehrreiche Schrifften*)," of Joh. Balth. Schuppen, Franckfurt-on-the-Maine, 1684. P. 900.

‡ "*Unvorgreiffliche Gedancken, betreffend die Ausübung und Verbesserung der Teutschen Sprache.*"

He merely carried out to completion an idea originated at the beginning of his century, and which had enlisted the labors of hundreds of learned men; namely, the introduction of the German language into use in the higher grades of instruction.

Toward the end of the seventeenth century, and in the former half of the eighteenth, we find the advocates for the use of German in schools and instruction increasing in number so rapidly that what was a hundred years before a bold innovation, may now be considered a predominant belief. Educators in all the countries of Germany united in the advocacy of this measure; the number of German school grammars became so great that I can refer only to a few of the more important; and the official reports upon the course of study of many classical schools shows the profound influence of these labors. Whereas it had been previously the custom to write even on German grammar in Latin, even the school grammars of Latin now began to appear more and more frequently in German.* German school comedies took the place of the previously usual Latin pieces.† Incessant practice in speaking Latin was no longer necessary, since German had replaced Latin as a school language. Even in the universities, the innovation of Thomasius rapidly grew in favor. Before the middle of the eighteenth century, the learned Johann Matthias Gesner declared that the able scholars in Latin had in part come out for the plan of teaching German, in order that the Latin language might be prevented from becoming entirely corrupted by the half-barbarous set who were defending it. "The German language," he writes, "is making rapid progress; and in a short time will be decidedly predominant. At the present time (1742) not even royal commands can prevent the practice of teaching in German."‡

I presume that these observations have sufficiently described the progress of the German in the schools during the seventeenth and eighteenth centuries. I can not of course detail the extent to which each individual classical institution adopted its use; but will conclude this chapter by a few instances of the kind, in order to give a more accurate idea of it. In Halle, the adoption of it was mainly due to the efforts of that indefatigable laborer for all grades of education, August Hermann Francke. He found that the students in theology were incredibly ignorant of German orthography. "This defect," he observes, "is commonly the fault of the schools, where only the Latin translation of the exercises is corrected, but the German not;

* See "*Journal of Education*," vol. ii., p. 371., *et seq.* I need not repeat at length what was there said.

† Ib., p. 009. ‡ Ib., p. 000.

so that orthography is not learned at all."* Francke induced Hieronymus Freyer, inspector of the Halle Pedagogium, to write a work which has been much used; his "*Introduction to German Orthography*," Halle, 1722.† In Brunswick, where Schottelius and Schrader‡ had already labored to promote the use of German in the schools, the excellent rector of the Catharine's school, Johann Andreas Fabricius,§ continued the enterprise. In the celebrated institution at Schulpforta, near Naumburg, associate principal Salomon Hentschel, found the German of the pupils as faulty as Francke had done at Halle. He exerted himself to remedy the evil; and hence resulted his "Fundamental rules of the High German language,"‖ Naumburg, 1729. We have already become acquainted with the two most eminent German grammarians of the end of the seventeenth and beginning of the eighteenth century, who were established at Berlin—Bödiker and Frisch.¶ At Hamburg, may be mentioned Hermann Wahn, associate principal of the John's school, who published, in 1720, a German Orthography, and afterwards a whole German grammar.** Upper Saxony had already long been one of the principal seats of the labors for promoting the use of the German. I barely refer to Wittenberg, in the sixteenth century, Weimar, in the seventeenth, and Leipzig, in the eighteenth; as well as to what has already been said of Meissen,†† Dresden, and Leipzig. I should here mention, as of interest with reference to the schools, the German-Latin and Latin-German Donatus published by Joh. Gottlieb Vorsatz, pastor at Zeitz, "for attaining the primary grade of knowledge in both these tongues."‡‡ The report of Rector Feuerlein, for 1690, shows what a strong foothold the German language had obtained at the school in Nuremberg.§§ In the extreme west of Germany, Johann Jacob Schatz, rector of the gymnasium at Trasbach, on the Mosel, labored efficiently as teacher and author, for the improvement of the instruction in German in the gymnasia.‖‖ Equal zeal for the

* See the whole passage this Journal, vol. v., p. 448, and compare Schrader's expressions to Schottelius in 1676, above, p. 429.

† "*Anweisung der Teutschen Orthographie.*" See its preface, fo. 2, 3.

‡ See above, p. 433.

§ Compare, amongst other works, Amarante's "*Shepherd and Flower Orders*," pp. 827—835; and also, on Fabricius and the others here mentioned. E. G. Reichard's "*History of German Grammar*," Hamburg, 1747.

‖ "*Grundregeln der Hoch-Deutschen Sprache.*" ¶ See above, pp. 437, 439.

** The references in the "*History of Pedagogy*," to the Hamburg school ordinance of 1732, will be found on being compared with Sturm and Trotzendorf, to indicate rather an advance in the use of German than otherwise.

†† The adjective "Misnian" has been used.—(*Translator.*)

‡‡ Published at Hildburghausen and Meiningen, 1745. 8vo.

§§ See this Journal, vol. vii., p. 370.

‖‖ He published "*Thorough and easy method for enabling children, as well in public*

cause prevailed in the south-east of Germany also; and Austria contributed its contingent to the mass of German grammars and orthographies that now appeared. Of these I will name but one; the "*Imperial German Grammar*,"* of Johann Balthasar von Antesperg, which appeared at Vienna, in 1747.

CHAPTER III.—GOTTSCHED AND ADELUNG.

After the middle of the eighteenth century, the number of German grammars, introductions to German orthography, German composition, &c., increased in a degree which was matter of pleasure to many, but perhaps even of terror to many others. The favorable feature of the case was the fact of the increase of interest in the German language and German literature; the unfavorable one, that so many more unfit persons than previously were trying their fortune in this department. Were I to treat the period from 1750 to 1850, on the same scale as the previous ones, even the mere enumeration of titles of books would require more space than I can devote to the whole subject. But at the same time, even the strongest advocate of modern times can not deny that the intrinsic value of this mass of books is mostly very small. Good will must too often be called in to make up for the defects in character. Accordingly, any one who devotes himself to the task of giving full estimates of these numerous works on grammar, style, &c., will often find himself under the necessity of either passing a sentence more harsh than is deserved upon the results of a zeal which though ignorant is well-intended, or of misleading his readers by some faint commendation. And moreover, the writers of this period who are really meritorious, are in fact, known at the present day as well as they deserve, and their works are everywhere accessible. I have therefore chosen to state the principles according to which opinions should be formed in these points, in my second book; and in this place, to go no further than to say as much of Gottsched and Adelung, the two greatest names of the period in question, as may serve to introduce the reader to the great revolution in this department of learning, which has been produced by the labors of the brothers Grimm.†

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schools as by private instruction, to learn in a short time and with little effort, the art of reading intelligently and writing plainly (Gründliche und leichte Methode Wie man sowohl in öffentlichen Schulen als auch durch Privat-Information denen Kindern die Kunst verständlich zu lesen und deutlich zu schreiben in Kurtzer Zeit und mit leichter Mühe beybringen möge)." &c. Büdingen, 1725. 8vo.

* "*Kayserliche Deutsche Grammatik.*"

† From the period from 1750 to 1836, many titles of books will be found in Hoffman's "*German Philology (Deutsche Philologie),*" Breslau, 1836. And compare the continuation of Reichard's work, already often referred to, in Rüdiger's "*Latest advances of German, foreign and general grammar (Neueste Zuwachs der deutschen, fremden und allgemeinen*

Of course the new impulse received by German literature since the middle of the eighteenth century, was felt in the department of the school course appropriated to the language. I do not here refer to the occasional contributions of a few eminent writers to some of the earlier favorite pursuits of German educators, especially in the department of orthography. Klopstock's writings in favor of orthographical innovations, and Hamann's humorous opposition to them, were without any lasting influence on the character of German grammar. What I mean is, the change produced by the revival of our literature upon the whole treatment of the German language in the higher and middle schools. Literary knowledge, good taste, and correct style, now assumed an important place in the schools. This new fact may be perceived in the introduction and increasing use of collections from the best German prose and poetical writers, adapted to the demands of a public possessed of some cultivation, and more particularly to the schools. In this department also, the first half of the eighteenth century affords a few pioneers, but there is a surprising difference between their labors and the vast mass of what has since been accomplished of a similar kind.

But the most striking indication of the increasing estimate placed on the German language is to be found in the school laws passed by the different German governments, during the second half of the eighteenth century.

Gottsched.

The more deeply we penetrate into the connections of different

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Sprachkunde)." Leipzig, 1785. Part 4. But I am far from intending to undervalue what is good in the labors of a more recent time. I shall hereafter have occasion to refer to the services which Becker, notwithstanding his errors, has rendered. With him should be mentioned Herling; whose "*Ground rules of German Style* (*Grundregeln des deutschen Stils*)," Frankfurt-on-the-Maine, 1823, preceded the works of Becker, and was republished in an enlarged form in 1832, as the second part of a "Syntax of the German Language." Among those who have labored to apply the investigations of Grimm to the use of the school grammar of the New High German, I would place first R. A. Hahn, "*New High German School Grammar*, (*Neuhochdeutsche Schulgrammatik.*)" 2d ed., Clausthal, 1853; and "*New High German Elementary Grammar*, (*Neuhochdeutsche Elementargrammatik.*)" 4th ed. Clausthal, 1856; Friedrich Koch, "*German Grammar*, (*Deutsche Grammatik.*)" 2d ed., Jena, 1854); F. Bauer, "*Outlines of New High German Grammar*, (*Grundzüge der Neuhochdeutsche Grammatik.*)" 3d ed., Nördlingen, 1853; and the writings of Kehrein and Vernaleken. The well known grammatical writings of J. Ch. A. Heyse, belong to a period before that of the renewal of the foundations of German grammar by the Grimms, and also before that of the reform of Becker. Heyse's labors have been materially improved by the studies of his son R. Heyse. In his own way, the deserving M. W. Götzinger rendered many services to the cause of instruction in German; and lastly, may be mentioned the small German grammar by Otto Schulze, 6th ed., Berlin, 1854. I have thus mentioned only individuals, as exponents of different methods of treating the subject. Each of them will be estimated according to the definition adopted by any one of the problem of instruction in German. On this head I refer to my second book. But however great the labor yet undone in the department of German school grammar, those who have already done good service in that field should have their due share of credit.

periods of time, the less shall we be satisfied with the sections and captions by means of which we sub-divide its current. And still, it is not only true that the reader needs some fixed divisions of time for his purposes, but also that there exist in the course of history, definite marks of the predominance of certain tendencies, although some indications of them have usually appeared in advance of the new epoch itself. These considerations come upon us with especial force, when we find ourselves obliged to recognize as the foremost man of any period, one of very moderate talents, and possessed of any qualities rather than genius and originality of conception. In such a case we do not see a creative intellect, evolving new and influential conceptions from within its depths, but merely a certain dexterity in comprehending what it is that the age demands, and in applying this knowledge to its own purposes. Thus is to be explained the position held by Gottsched in the history of German literature. And his importance as a German grammarian does not depend upon great labors, of great value in themselves, in that department, but is most closely interwoven with all his literary work. Accordingly, we shall have no occasion to busy ourselves with the details of his writings on grammar, although at the same time our purpose will lead us more carefully to consider the relation between Gottsched's grammar and his remaining writings. Without therefore plunging too deeply into German literary history, let us devote a few words to this point.

Johann Christoph Gottsched, who was born, in 1700, at Juditenkirch, in East Prussia, appointed professor at Leipzig, in 1730, and died there in 1766, enjoyed, while at the summit of his reputation, a fame whose splendor has been surpassed only by the very loftiest of our nation.* If this seems incredible now, upon a perusal of his writings, perhaps the best explanation of the phenomenon will be found in the very subject which we are now to discuss. We have already seen, in the second chapter of this essay, that the philological labors of the century preceding Gottsched, had been mainly directed to the improvement of the methods of teaching German; and that the current of these efforts had grown stronger and stronger up to the period of Gottsched's appearance. During the same period, the feeling also grew up that German literature, in order to gain an introduction into the higher circles of society, must adopt its garb more to the taste prevailing there than had been the case with most of the German authors of preceding centuries. But this prevailing

* See Danzel's "*Gottsched and his times* (*Gottsched und seine Zeit*)," Leipzig, 1848. Extracts from this, descriptive of Gottsched's fame in the period of his renown—certainly a short one—are in the "*Munich Literary Gazette* (*Münchner Gelehrten Anzeiger*)," 1848, No. 211.

taste was no other than the French taste of the seventeenth century and the beginning of the eighteenth. Now, any one who should succeed in gratifying both these demands, for improvements in German grammar, and for a French character in it, must necessarily acquire with remarkable speed a great réputation, both in the schools, which were so deeply interested in studying German, and with the "educated classes," who would find their desired French taste exhibited in German compositions; and at the same time it must be confessed that neither the one nor the other of these tasks required a remarkably high grade of talent. All that was needed was, like Gottsched, to lay hold of the undertaking with confidence and determination, to follow it up with ceaseless activity and a zeal not to be mistaken and indeed really praiseworthy, and to secure the advantages already gained, and a constant succession of new ones by the medium of newspapers, philological societies, the protection of persons of eminence, and other means.

Within this system of various effort, the grammars of Gottsched assume their proper importance. In 1748 appeared at Leipzig one of them, viz., "*Outline of a German grammar, on the models of the best writers of the present and last centuries, by Johann Christoph Gottsched.*"* This book reached a second edition in the very next year; and a sixth in 1776. Subsequently, in 1753, Gottsched published, for the special use of youth, an abridged outline. If we except the dictatorial rules which Gottsched is constantly laying down, we find much to praise in his grammar. He shows himself acquainted with the ancient authorities on our language,† refers with appreciation to his predecessors,‡ and speaks with more judgment than many would expect, of the limits of the department of the grammarian.§ His treatment of grammatical subjects does not contain much that is new. It is very characteristic that he terms the strong verbs, which Schottelius had named "unconformable" or "anomalous," in plain terms "irregular verbs." But he makes up for this oversight, by saying, "Hence it is clear, that notwithstanding all the apparent irregularities of this inflection, still there is therein a certain order, regulated by rules."‖ Respecting the High German written language, Gottsched differs materially from the best of his predecessors; indeed, here is the rock upon which his poetical and grammatical dictatorship was wrecked. He can not maintain, in the face of such clear evidence,

* "*Grundlegung einer Deutschen Sprachkunst, nach der Mustern der besten Schriftsteller des vorigen und jetzigen Jahrhunderts abgefasset von Johann Christoph Gottscheden.*"

† Compare for example, pp. 9, 19, 365, *et seq.* I quote from the 4th ed., Leipzig, 1757; though I give the title from the 1st ed., of 1748.

‡ Preface, fo. 6. § P. 6, 10. ‖ P. 331.

that "the vulgar" used the most correct forms of expression, even in the Saxon cities;* but he still maintains with the most triumphant certainty of being right that at Meissen and its vicinity is spoken the best High German;† and that we "in Germany must without doubt conjoin to the very agreeable oral dialect of Dresden, the capital of electoral Saxony, and of the court, those grammatical rules and critical observations which were made at Leipzig many years ago, and have been applied to the written language."‡ Gottsched, like most others, thinks his own age better than those preceding it. "The period of the government of our most illustrious prince, Augustus II., of Saxony," he says,§ "well deserves to be called the golden age of our language."‖ It was Gottsched's misfortune to have made this complacent statement just at the beginning of a new era which was soon to turn it into ridicule.

But all this will not so definitely distinguish Gottsched from his predecessors, as to account for the reputation which he gained. The reason is rather to be looked for in the manner in which Gottsched connected his grammar with literature. Thus it is well worth noticing, that the very title to his German grammar says, "On the models of the best writers of the *present and last* centuries"—that is, not of the sixteenth, seventeenth and eighteenth, but only of the seventeenth and eighteenth. Thus, the long series of grammarians who followed each other in the footsteps of Luther, ends with Gottsched; and in the place which he occupied with them, appears Opitz. The ancient rugged forms of the writers before Opitz, according to Gottsched, may indeed possess more strength; "but fall far below the present style of writing in agreeableness and euphony."¶ "The multitude of good writings published since the time of Opitz, and with which the eighteenth century especially has enriched almost every one of the arts and sciences, gives to our own times an undeniable privilege to prefer its own methods of syntax to the ancient German ones."** Into the direction indicated by Opitz, therefore, and into the French taste, Gottsched now desired to change the whole literature and literary opinions of Germany. The enterprise was of course doomed to shipwreck upon the opposition of those great German minds, of whose near approach Gottsched had no suspicion.

* Pp. 3, 404. † Pp. 67, 69. ‡ P. 403.

§ That is, the period from 1694 to the middle of the eighteenth century; for it was at this latter time that these words were written.

‖ P. 19. ¶ P. 18.

** P. 401; and compare p. 575. Gottsched's praise of Luther in another place is of course not inconsistent with these views. On the close connection between Gottsched and Opitz, see the excellent observations of Gervinus, "*History of German Poetry*," vol. 3, (1838), p. 199; and vol. 4, (1840), p. 50.

But it was not without its influence upon literature; and its conjunction of literature and grammar had a very distinct influence upon the upper grades of schools. The scope of grammatical instruction in these was no longer confined merely to spelling correctly and the use of the native German language in the ordinary concerns of practical life, but special attention was now paid to good taste, to literary criticism, and frequently even to actual composition in prose and verse.*

Adelung.

The inheritor of Gottsched's fame in the field of German grammar was Johann Christoph Adelung; who was born, in 1724, at Spantekow, near Anklam in Pomerani, studied at Halle, became professor in the gymnasium at Erfurt in 1759, and taught privately at Leipzig from 1763 to 1787, when he was appointed chief librarian at Dresden. He died in 1806.† Adelung devoted the iron industry of a long life to the task of laboring upon the grammar and lexicology of German. A complete list of the titles of his works on this subject would fill several pages. I will name the most important of them. The "*Grammatical and critical dictionary of the High German language*"‡ appeared first, in 1774–86; and the second edition in 1793—1801. The "*German grammar for schools*,"§ first appeared in 1781, and its sixth edition in 1816. The "*Complete system of the German language*,"‖ came out in 1782, in two large volumes. Lastly, the book "*On German style*"¶ was published in 1785, and a fourth edition in 1800. Adelung was in most of his writings a follower of Gottsched. Whatever can be said in Gottsched's praise, is applicable to Adelung in a still higher degree. As with Gottsched, so with Adelung, clearness and correctness are the qualities most sought for. Like Gottsched, Adelung lays great stress on taste; and it must be admitted that in all these particulars he surpasses his predecessor.

* At a more modern period, the late lamented Danzel endeavored to urge again the permanently valuable part of Gottsched's views. But although his book contains much that is valuable, the reader must be on his guard against its extreme ideas. See the Munich "*Literary Advertiser (Gelehrten Anzeiger)*," 1848, No. 210, 211. I believe that the introductory words of this section of my own work will secure me against such an error. Gottsched had of course predecessors even in his characteristic opinions. As early as in the philological societies of the seventeenth century, grammar and literary labor were united. We may even detect still earlier, in the sixteenth century, in Clajus and Oelinger, refereuces to literature. Still, it is needless here to prove at length that all this is entirely distinct from that style of literary criticism which Gottsched learned from Horace and the French. The labors of Morhof, Bödiker, and others, form a transition to Gottsched.

† Jördens, "*Lexicon of German poets and prosemen (Lexikon deutscher Dichter und Prosaisten)*." I. p. 13; v. p. 700.

‡ "*Grammatisch-kritische Wörterbuch der Hochdeutschen Mundart*."

§ "*Deutsche Sprachlehre für Schulen*."

‖ "*Umstandliche Lehrgebäude der Deutschen Sprache*."

¶ "*Ueber den deutschen Styl*."

And moreover, Adelung, as Gottsched had done, devoted much labor to the investigation of the old German literature and language. And they both agree further in this; that there is visible throughout all their works, a consciousness either expressed or implied, of the remarkable importance and ability of their achievements. If either of them goes beyond the other in this particular of a low estimate of previous periods and labors, it is Adelung. There is one important point upon which Gottsched and Adelung apparently differ; but even here, Adelung has in fact only completed what Gottsched had begun. This point is the question, What is the High German language? Adelung himself laid great stress upon the fact that Gottsched had asserted the High German to be the result of the labors of authors, while he himself had earnestly combatted this opinion.* But although Adelung was more definite than Gottsched in asserting that language was not a production of authors, and least of all of grammarians, still expressions to the same effect are not wanting in the latter. And both agree in claiming that the Misnian dialect is the proper, authoritative, classical High German. Not, that is, the speech of the lower classes; Gottsched had perceived this:—but that of "the upper classes of Upper Saxony."† This doctrine of course brought him into a violent opposition to the whole German literature of the new period, which was now receiving reinforcements from all parts of Germany. And Adelung misapprehended the character of the times no less, when he not only, like others of the grammatical school, looked with cautious wonder upon the great creations of Klopstock, Lessing, and Goethe, but asserted, completely possessed by his delusion, that "in respect to excellence of style, the second quarter of this century‡ was preëminently distinguished; a period during which appeared in Saxony those good writers who quickly became models for all Germany."§

There is another important point respecting which Gottsched and Adelung are strikingly alike. This was, the effort which they both made to give greater clearness and logical consistency to German grammar, by connecting it with certain general philosophical views, which views themselves, as held by the two men, were closely related.

* See Adelung, against Voss; in the department of news, in the "*New Leipzig Gazette of Literature (Neues Leipziger Literaturzeitung)*," March 31, 1804.

† Adelung, "On German Style," ed. 1785, i., 58, 59, and in innumerable other places. See especially the preface of the "Complete System," p. lviii. The most violent of the attacks upon this view of Adelung, was that by Joh. Heinr. Voss, in the "*Jena Universal Gazette of Literature (Jena Allgem. Literatur-Zeitung)*," for January and February, 1804.

‡ Viz., from 1725 to 1750.

§ "On German Style," ed. 1785, i. 23. And compare § 19, subsequently; where Adelung measures out to his cotemporaries, but grumblingly, some little praise.

Gottsched was a thorough adherent of the Wolfian philosophy, while Adelung rejected all philosophical "sectarianism," declaring in favor of the eclecticism which "preceded the prevalence of Kant's system." He says however, in 1786, "Thus, in recent times, almost every philosopher of acuteness and intellect has his own eclectic system; of which the Leibnitz-Wolfian hypothesis is more or less the basis."*

This style of philosophy is closely connected with one of the most prominent traits of Adelung's writings, viz., their clear and intelligible character. Lucidity and industry were his most valuable traits, and I designedly make this additional reference to them, for it was to them that his works owe their great influence upon the schools of the period. But a search after the higher excellences of literary composition, depth of thought and demonstrative correctness of fundamental view, would encounter in Adelung only the most discouraging shallowness. His modest and incontestably truth-loving nature told him that language was neither the work of learned men, nor was its original creation a proof of mental culture.† But instead of tracing the course of this great work of nature with that reverence which is the only means of arriving at truth, Adelung knew no better than to utter constant complaints against the original coarseness of the languages. These charges he did not restrict to the limited department of mere ideas, but extended them to grammatical principles, and to the sounds and the euphony of the language. Here, he received no aid from the monuments of ancient German literature; and no warnings from his knowledge of Greek literature and its Homer. "Coarse, uncouth, vulgar," are the terms which at every third word he applies to the language of those people who have not made that surprising progress in trade or science which distinguished his much praised second quarter of the eighteenth century. All Adelung's works show how profound an influence such errors may exert on opinions relating to subsequent periods. No one acquainted with Adelung's works will need any especial proofs of these statements. I will however cite a few of the innumerable passages in point from Adelung's writings, for the information of those less familiar with them. In speaking of the language of the Germans during the first centuries of our era, Adelung says, "A people so uncultivated could have but few ideas, and those mostly material; and their language must therefore be extremely poor. Their vocal organs were coarse and uncouth; and could therefore express the few ideas they

* "*History of philosophy for amateurs* (*Geschichte der philosophie für Liebhaber*)." Leipzig, 1786, vol. ii., p. 425.

† "Complete System," i., 7; "On German Style," i., 5.

had, only by rough and uncouth sounds."* But would he not draw an opposite conclusion from the Gothic language, which had then been well-known for a long time? This is what he observes on this head, a few pages further: "As the Gothic language was then† very rough and uncouth, and destitute both of terms for abstract conceptions, and of sufficient flexibility in combining words and sentences," &c.‡ Of the poets of the Hohenstaufen, Adelung says, "They were entirely destitute of invention, wit, enthusiasm, in short of poetical genius."§ Nor does Luther, whom he finds other reasons for praising, escape without severe reproof from this strict judge. He did, it is true, take great pains in polishing; and approached as nearly as his opportunities admitted, to the strictly Misnian dialect. But if he had only enjoyed more leisure for the purpose, "he would have made further progress, both in orthography and in grammatical correctness. For he is not always consistent in the former; and with regard to the latter, very many faults and incorrectnesses have escaped his observation, even in the German Bible; which must therefore be considered any thing rather than a classic."‖

CHAPTER IV.—THE BROTHERS GRIMM.

A more complete contradiction can scarcely be imagined, than that between the labors of the brothers Grimm and the views of Adelung. As the latter adopted as a basis for his grammatical labors the second quarter of the eighteenth century, viz., the years 1725–50, so the writings of the brothers Grimm may be considered as holding a similar relation to that outburst of real poetry which was inaugurated by Goethe and his friends in 1760–70. The Grimms did not, it is true, endeavor to establish the literature of that period as an infallible standard of language, as Adelung did those of 1725–50; but there is a relation between their principles and those which prevailed in the literature spoken of, which justifies the parallel.

Jacob Grimm was born at Hanau, in 1785; and in the spring of 1802, entered the university of Marburg, and studied law under Savigny, the importance of whose influence upon Grimm's studies is mentioned in the graceful dedication of his Grammar to Savigny. In 1804, Jacob's younger brother Wilhelm, born at Hanau in 1786, also came to Marburg, also to study jurisprudence under Savigny. The brothers pursued their professional studies with pleasure and zeal,

* "Complete System," i., 18. † Viz., in the time of Ulfilas.

‡ "Complete System," i., 23. There is no difficulty in recognizing the truth contained in these expressions; but the unintelligent nature of their views, as taken in connection with other expressions by Adelung, is none the less.

§ Ib., i., 54. ‖ Ib., i., 66.

but even at this early period found themselves attracted toward the task of their lives, the investigation of the German language and antiquities. After completing their studies at the university, the brothers resided in Cassel, most of the time together; their union being however interrupted by the important affairs which took Jacob Grimm to Vienna and Paris, during the years 1814–15–16. Since, however, Jacob was appointed second librarian of the library at Cassel, where Wilhelm had already become secretary to the library in 1814, they have resided together almost uninterruptedly. In 1829, an honorable appointment brought them to Göttingen, where, however, they were deprived of their places eight years afterwards, for adhering to the constitution to which they had taken an oath. In 1841, the king of Prussia invited them to Berlin.

I shall not here enumerate all the works of the brothers Grimm. These have partly been produced by them both together, and partly by one of them individually. By both, are the "*Children's and Home Stories*," the "*German Legends*," and the "*German Dictionary;*" by Jacob alone, the "*German Grammar*," "*Legal Antiquities*," "*Mythology*," and "*History of the German Language;*" and by Wilhelm alone, the "*Ancient Danish Heroic Ballads*," and the "*German Heroic Legends.*"

A full description of what the brothers Grimm have done and attempted, would carry us into very various departments of knowledge, and which we can not discuss in this place without quite losing sight of our immediate theme. And yet, there is no one in whose works it is less possible to wholly separate any one phase of occupation from the others. My simplest mode of stating the necessary description, and one which I believe will satisfy many of my readers, is to say, that the brothers Grimm belong to the historical school, in opposition to Ferdinand Becker, who is of the philosophical school. But though this distinction is correct enough, still it does not give much information; for it does not decide the question what is meant by the two terms, historical and philosophical; terms with which an endless number of misconceptions have been connected. It is possible that I may more nearly obtain the desired result by citing from the brothers Grimm themselves, some of the most definite of the statements which they have given of their views and methods of investigating.

The leading traits in the character of the brothers Grimm are reverence for history, keen poetic sensibilities, and a warm love for all that is German and patriotic. This respect for history, which characterizes all the productions of the brothers, is thus expressed in Jacob Grimm's dedication of his greatest work to Savigny; "I am already

certain that you will do justice to my attempt to commence an investigation of our German antiquity from this direction, and will approve of my idea of proving that grammar also establishes the inviolableness and necessity of history."* A feeling for poetry is almost more characteristic of the brothers Grimm, in distinction from Gottsched, Adelung, and their school, even than these views respecting history. Instead of like them, everywhere deifying conventionalities, and regarding every thing that is good in language and poetry as only an evidence of refined culture, the Grimms are constantly disposed to favor what is original, natural, and the immediate result of native mental action. These tendencies of course implied the direct opposite of Adelung's unintelligent opinions on German antiquity and the ancient German poetry. This should not however be taken to signify that the Grimms had that mistaken kind of patriotism which over-estimated every thing that is modern and German, or underrated the excellence of the classical productions of antiquity. They have expressed views precisely the opposite of these in many places and in the clearest manner. Jacob Grimm, in the dedication already quoted, has most gracefully expressed his sense of the value of native compositions. "Real poetry," he says, "is like a man who finds a thousand sources of pleasure in seeing leaves and grass grow, and the sun rise and set; false, like one who travels in foreign lands, and fancies that he is improving himself on the mountains of Switzerland, or under the sky, or on the sea of Italy; but although he is there, his pleasure is probably far from being as great as that of him who remains at home, and watches the apple trees blossom every year in his garden, and the finches pecking at them."† The Grimms have preserved a true appreciation of history, and for all natural developments from real life, instead of the foolish contempt which superficial men have displayed toward the institutions and manners of ancient times. They have contributed more than any one else toward a just and affectionate estimate of the Middle Ages; although they have quite preserved themselves from the absurdity of undertaking to transplant those ages bodily into our own times. Wilhelm Grimm observes with much justice on this point in his brief account of his life, "Only the narrowest mind could undertake to investigate mediæval history with the intention of transplanting it into the present; but it would indicate equal folly of an opposite kind, to

* Grammar i., p. 4.

† Grammar i., p. 7. I believe I have not injured the meaning of the quotation by giving only its positive part, and omitting the polemic reference to Ariosto. The relations between nature and cultivation will be discussed, so far as they belong to instruction in language, in my second book.

endeavor to ignore the influence which the middle ages must exert upon our comprehension and proper treatment of the present."*

As a grammarian, Jacob Grimm is exactly opposed to Gottsched, Adelung and their school, by not undertaking to lay down laws for the use of the German language. His labors are directed to the object of investigating laws already established. The remarkable discoveries to which this method has led, are well known. Grimm's pioneers in his labors must not therefore be taken to be the grammarians of whom I have given some account, and whose excellence lies in quite another field. The materials for his investigations were found to some extent, though not great, prepared, in the works of those who had before him pursued the study of the existing monuments of the Gothic, Anglo-Saxon, and ancient Scandinavian and German languages. The history of these studies, which belongs to Iceland, Denmark, Sweden, Norway, and England, as well as Germany, is of course often connected with that of the series of grammarians of which I am treating. At the same time, however, it also constitutes a separate department of learning, not properly to be introduced in a history of instruction in German. Grimm has at all times acknowledged whatever was valuable in the works of his philological predecessors; but as to the relations between him and the average of German grammarians, he thus expresses himself in the preface to his grammar†:—

"From the first grammatical treatment of the German language down to Adelung, a good number of books were written on the subject; from Adelung to the present time, a still greater number. But as I do not desire to be ranked with these, but on the contrary to be quite separated from them, I must at the outset declare why I consider objectionable, and even foolish, the usual methods and ideals of the theories of German, especially those put forth and received during the last half century. It has gradually become the practice to make these books manuals of instruction in all the schools; and to recommend them even to adults, for the culture and development of their powers of language: an excessively pedantical proceeding, and one which it would require great exertions even to make intelligible to a Greek or a Roman, could he now be raised from the dead. Most of our cotemporary nations have been wiser than we, in that they have not so seriously set about making their own language a subject of in-

* Wilhelm Grimm's autobiography; in the "*Beginning of a History of the literati, authors and artists of Hesse, from* 1806 *to* 1830, (*Grundlage zu einer Hessischen Gelehrten, Schriftsteller, und Kunstler-Geschichte vom Jahr*, 1806, *bis zum Jahr*, 1830)," by K. W. Justi. Marburg, 1831. P. 173.

† Grammar i., pp. 9, 11.

struction at school. A close investigation will quickly reveal the hidden harm which such instruction, like all that is superfluous, brings with it. My own belief is, that it obstructs the free development of the organs of speech in children, and violates a most valuable provision of nature, that our speech shall come to us with the mother's milk, and be developed to its maturity within the precincts of home. Language, like every thing derived from nature or habit, is an unknown, inscrutable mystery, planting itself at first within the young, and adapting the organs of speech to the peculiar hard or soft tones, inflections, modulations, of the people. This habitual adaptation produces that ineradicable sense of longing which every man feels when in a foreign land, the sounds of his own tongue fall upon his ear; and it also accounts for the impossibility of learning a foreign language; that is, of learning it completely and intimately. Now, who can believe that a development rooted so deeply, and regulated by a law of nature so wisely economical, can be modified or promoted by the perverted, stupid and misconceived rules of grammar-masters; and who does not feel a sympathy for unchildlike children and youth, who speak a pure and polished language perhaps, but who when grown up can feel no home sickness for their youth? Ask a genuine poet, whose principles respecting the material, spirit and rules of language would certainly differ far from those manufactured by grammarians and dictionary-makers, what he ever learned out of Adelung; and whether he is a follower of him? Six hundred years ago, every common peasant knew—that is, was daily practicing—perfections and elegancies in German, of which our best teachers in language now-a-days do not even dream. In the poems of Wolfram von Eschenbach, or of Hartmann von Aue, who had never heard of declension and conjugation, and perhaps could not even read or write, distinctions of substantives and verbs are observed with a purity and accuracy of inflection and location, which we must now discover gradually by the methods of learned investigation, but can not now return to; for the language goes on in its unalterable course. Even if I shall fail to describe with sufficient truth the earlier peculiarities and fortunes of our German language, out of such of its early monuments as survive, still I am confident that even a more imperfect representation of what I have had in mind, would possess power enough to demonstrate the entire incompetency of all the grammatical rules which have thus far been so painfully elaborated, even in those simplest outlines upon which all the rest must depend. And if these theories of language are thus shown to be themselves all deception and error, then there will at once be furnished evidence enough of the fruits which they

must produce in our schools; and of their necessary tendency to destroy rather than to develop, the germs of the natural faculties of language. And it is an observation both undeniable and of importance here, that girls and women who have been least tormented in the schools, speak with more correctness, arrange their words more elegantly, and select them more naturally; because they follow more obediently the requirements of the nature within them. And the style of their language will keep pace in development and polish, with their mental progress, of its own accord, and of necessity. Every German who understands his own language in a plain, correct, common-sense manner—that is to say, without having been taught it by rules, is entitled to call himself, to use the striking expression of a French writer, an independent living grammar; and boldly to ignore all the rules of the grammar-masters."

"If as these views imply there is no such thing as a grammar of the native language adapted for use at school and at home, no such thing as a dry outline of those simplest and for that very reason most wonderful elements of language, of which each has lived for an immeasurable period before arriving at its present shape;—it follows that the study of grammar can be nothing except a strictly scientific one; and either philosophical, critical, or historical, according to the method in which it is pursued."*

* To avoid misunderstanding, I add here that I do not undertake to give a history of the study of the ancient German. Such a one would of course in this place most naturally discuss the pupils and cotemporaries of the Grimms.

VII. PHYSICAL EDUCATION.

As Physical Training—its principles and methods—is at this time receiving more than ordinary attention from teachers and the public generally, in connection with plans of military education, we shall bring together earlier than we had intended, the suggestions of eminent writers, with accounts of systematized exercises, including juvenile and popular pastimes, in different countries, bearing on the subject.

There is much of the highest educational value in the military element in schools, including in that term all that is peculiar in studies, drill and discipline, designed to train officers and soldiers for the exigences of war, or to cultivate a military spirit and preparation among the people. But we do not believe that any number of juvenile military schools, any organization of cadet-corps, however extensive, any amount of drill or target-shooting, valuable as all these are for general or specific purposes, will cover the whole field of physical culture, which must begin far back in the home, with parents and nurses, and extend out into the daily life of every man, woman and child. Neither will these schools, and appliances, and practices be an adequate substitute for the severe scientific study and special training which the experience of every European government has found necessary, in the present condition of human affairs, for the preparation of officers both for the army or the navy.

We hope to see military drill and discipline, as well as systematic gymnastic exercises, worked into many of our schools, both public and private, under proper regulations, and well-qualified instructors, but not to supersede old-fashioned games and sports, or to diminish the amount of hard study. Under proper conditions of safety, play—free and varied as nature prompts, and all young animals delight in, affords the best exercise for little children and young scholars; and study, work, and sports, judiciously alternated, constitute our course of gymnastics for consolidating the constitution of youth and fore-ordaining a manhood of prolonged strength and usefulness. Let us have good teaching, and enough of it,—hard study and more of it, with suitable alternation of subjects and frequent infusion of exhilarating play as well as of systematic exercises,—useful work in field and shop, with less intensity in the pursuit of wealth and office, and more indulgence in outside and fireside recreation,—let us have more and better knowledge of the laws of health, more of heart culture, as well as of mental and bodily vigor, more exercise of the gentle and kindly sympathies, more of the refining enjoyments of the beautiful in nature and art, more of the ennobling perceptions of moral beauty and virtue, and the daily practice of obedience, veneration, temperance and patriotism, and we shall be a healthier and a happier people.

VIII. SOME THOUGHTS ON EDUCATION.

BY JOHN LOCKE.

DEDICATION TO EDWARD CLARKE, OF CHIPLEY.

SIR,—These Thoughts concerning Education, which now come abroad into the world, do of right belong to you, being written several years since for your sake, and are no other than what you have already by you in my letters. I have so little varied any thing, but only the order of what was sent you at different times, and on several occasions, that the reader will easily find, in the familiarity and fashion of the style, that they were rather the private conversation of two friends than a discourse designed for public view.

The importunity of friends is the common apology for publications men are afraid to own themselves forward to. But you know I can truly say, that if some who having heard of these papers of mine, had not pressed to see them, and afterward to have them printed, they had lain dormant still in that privacy they were designed for. But those whose judgment I defer much to, telling me, that they were persuaded, that this rough draught of mine might be of some use, if made more public, touched upon what will always be very prevalent with me. For I think it every man's indispensable duty, to do all the service he can to his country; and I see not what difference he puts between himself and his cattle, who lives without that thought. This subject is of so great concernment, and a right way of education is of so general advantage, that did I find my abilities answer my wishes, I should not have needed exhortations or importunities from others. However, the meanness of these papers, and my just distrust of them, shall not keep me, by the shame of doing so little, from contributing my mite, where there is no more required of me than my throwing it into the public receptacle. And if there be any more of their size and notions, who liked them so well that they thought them worth printing, I may flatter myself they will not be lost labor to every body.

I myself have been consulted of late by so many, who profess themselves at a loss how to breed their children, and the early corruption of youth is now become so general a complaint, that he can not be thought wholly impertinent who brings the consideration of this matter on the stage, and offers something, if it be but to excite others, or afford matter of correction. For errors in education should be less indulged than any; these, like faults in the first concoction, that are never mended in the second or third, carry their afterward-incorrigible taint with them through all the parts and stations of life.

I am so far from being conceited of any thing I have here offered, that I should not be sorry, even for your sake, if some one abler and fitter for such a task would, in a just treatise of education, suited to our English gentry, rectify the mistakes I have made in this; it being much more desirable to me, that young gentlemen should be put into (that which every one ought to be solicitous about,) the best way of being formed and instructed, than that my opinion should be received concerning it. You will, however, in the meantime bear me witness, that the method here proposed has had no ordinary effects upon a gentleman's son it was not designed for. I will not say the good temper of the child did not very much contribute to it, but this I think you and the parents are satisfied of, that a contrary usage, according to the ordinary disciplining of children, would not have mended that temper, nor have brought him to be in love with his book

to take a pleasure in learning, and to desire, as he does, to be taught more than those about him think fit always to teach him.

But my business is not to recommend this treatise to you, whose opinion of it I know already; nor it to the world, either by your opinion or patronage. The well educating of their children is so much the duty and concern of parents, and the welfare and prosperity of the nation so much depends on it, that I would have every one lay it seriously to heart; and, after having well examined and distinguished what fancy, custom, or reason advises in the case, set his helping hand to promote every where that way of training up youth, with regard to their several conditions, which is the easiest, shortest, and likeliest to produce virtuous, useful, and able men in their distinct callings; though that most to be taken care of is the gentleman's calling. For if those of that rank are by their education once set right, they will quickly bring all the rest into order.

I know not whether I have done more than shown my good wishes toward it in this short discourse; such as it is, the world now has it; and if there be any thing in it worth their acceptance, they owe their thanks to you for it. My affection to you gave the first rise to it, and I am pleased, that I can leave to posterity this mark of the friendship has been between us. For I know no greater pleasure in this life, nor a better remembrance to be left behind one, than a long continued friendship, with an honest, useful, and worthy man, and lover of his country.

I am, Sir,

Your most humble

And most faithful servant,

March 7, 1690. JOHN LOCKE.

EDUCATION IN GENERAL.

1. A sound mind in a sound body, is a short but full description of a happy state in this world: he that has these two, has little more to wish for; and he that wants either of them, will be but little the better for any thing else. Men's happiness or misery is most part of their own making. He whose mind directs not wisely, will never take the right way; and he whose body is crazy and feeble, will never be able to advance in it. I confess, there are some men's constitutions of body and mind so vigorous, and well-framed by nature, that they need not much assistance from others; but, by the strength of their natural genius, they are, from their cradles, carried toward what is excellent; and, by the privilege of their happy constitutions, are able to do wonders. But examples of this kind are but few; and I think I may say, that, of all the men we meet with, nine parts of ten are what they are, good or evil, useful or not, by their education. It is that which makes the great difference in mankind. The little, or almost insensible, impressions on our tender infancies, have very important and lasting consequences: and there it is, as in the fountains of some rivers where a gentle application of the hand turns the flexible waters into channels, that make them take quite contrary courses; and by this little direction, given them at first, in the source, they receive different tendencies, and arrive at last at very remote and distant places.

PHYSICAL EDUCATION. HEALTH.

2. I imagine the minds of children as easily turned, this or that way, as water itself; and though this be the principal part, and our main care should be about the inside, yet the clay cottage is not to be neglected. I shall therefore begin with the case, and consider first the health of the body, as that which perhaps you may rather expect, from that study I have been thought more peculiarly to have applied myself to; and that also which will be soonest dispatched, as lying, if I guess not amiss, in a very little compass.

3. How necessary health is to our business and happiness, and how requisite a strong constitution, able to endure hardships and fatigue, is to one that will make any figure in the world, is too obvious to need any proof.

TENDERNESS.

4. The consideration I shall here have, of health, shall be, not what a physician ought to do, with a sick or crazy child; but what the parents, without the help of physic, should do for the preservation and improvement of an healthy, or, at least, not sickly constitution, in their children: and this perhaps might be all despatched in this one short rule, viz., that gentlemen should use their children as the honest farmers and substantial yeomen do theirs. But because the mothers, possibly, may think this a little too hard, and the fathers, too short, I shall explain myself more particularly; only laying down this, as a general and certain observation for the women to consider, viz., that most children's constitutions are either spoiled, or at least harmed, by cockering and tenderness.

WARMTH.

5. The first thing to be taken care of is, that children be not too warmly clad or covered, winter or summer. The face, when we are born, is no less tender than any other part of the body; it is use alone hardens it, and makes it more able to endure the cold. And therefore the Scythian philosopher gave a very significant answer to the Athenian, who wondered how he could go naked in frost and snow: "How," said the Scythian, "can you endure your face exposed to the sharp winter air?" "My face is used to it," said the Athenian. "Think me all face," replied the Scythian. Our bodies will endure any thing that from the beginning they are accustomed to.

An eminent instance of this, though in the contrary excess of heat, being to our present purpose, to show what use can do, I shall set down in the author's words, as I met with it in a late ingenious voyage:* "The heats," says he, "are more violent in Malta than in any part of Europe: they exceed those of Rome itself, and are perfectly stifling; and so much the more, because there are seldom any cooling breezes here. This makes the common people as black as gypsies: but yet the peasants defy the sun: they work on in the hottest part of the day, without intermission, or sheltering themselves from his scorching rays. This has convinced me that nature can bring itself to many things which seem impossible, provided we accustom ourselves from our infancy. The Maltese do so, who harden the bodies of their children, and reconcile them to the heat, by making them go stark naked, without shirt, drawers, or any thing on their head, from their cradles, till they are ten years old."

Give me leave, therefore, to advise you not to fence too carefully against the cold of this our climate: there are those in England, who wear the same clothes winter and summer, and that without any inconvenience, or more sense of cold than others find. But if the mother will needs have an allowance for frost and snow, for fear of harm, and the father, for fear of censure, be sure let not his winter-clothing be too warm; and amongst other things remember, that when nature has so well covered his head with hair, and strengthened it with a year or two's age, that he can run about by day, without a cap, it is best that by night a child should also lie without one; there being nothing that more ex-

* Nouveau Voyage du Levant, $\frac{1}{1}\frac{6}{7}\frac{0}{3}$.

poses to headache, colds, catarrhs, coughs, and several other diseases, than keeping the head warm.

6. I have said *he* here, because the principal aim of my discourse is, how a young *gentleman* should be brought up from his infancy, which in all things will not so perfectly suit the education of daughters; though, where the difference of sex requires different treatment, it will be no hard matter to distinguish.

FEET. ALTERATIONS.

7. I would also advise his feet to be washed every day in cold water; and to have his shoes so thin, that they might leak and let in water, whenever he comes near it.* Here, I fear, I shall have the mistress, and maids too, against me. One will think it too filthy; and the other, perhaps, too much pains to make clean his stockings. But yet truth will have it, that his health is much more worth than all such considerations, and ten times as much more. And he that considers how mischievous and mortal a thing taking wet in the feet is, to those who have been bred nicely, will wish he had, with the poor people's children, gone barefoot; who, by that means, come to be so reconciled by custom, to wet their feet, that they take no more cold or harm by it than if they were wet in their hands. And what is it, I pray, that makes this great difference between the hands and the feet in others, but only custom? I doubt not, but if a man from his cradle had been always used to go barefoot, whilst his hands were constantly wrapped up in warm mittens, and covered with hand shoes, as the Dutch call gloves; I doubt not, I say, but such a custom would make taking wet in his hands as dangerous to him, as now taking wet in their feet is to a great many others. The way to prevent this, is to have his shoes made so as to leak water, and his feet washed constantly every day in cold water. It is recommendable for its cleanliness: but that, which I aim at in it, is health. And therefore I limit it not precisely to any time of the day. I have known it used every night with very good success, and that all the winter, without the omitting it so much as one night, in extreme cold weather: when thick ice covered the water, the child bathed his legs and feet in it; though he was of an age not big enough to rub and wipe them himself; and when he began this custom, was puling and very tender. But the greater end being to harden those parts, by a frequent and familiar use of cold water, and thereby to prevent the mischiefs that usually attend accidental taking wet in the feet, in those who are bred otherwise; I think it may be left to the prudence and convenience of the parents, to choose either night or morning. The time I deem indifferent, so the thing be effectually done. The health and hardiness procured by it, would be a good purchase at a much dearer rate. To which if I add the preventing of corns, that to some men would be a very valuable consideration. But begin first in the spring with lukewarm, and so colder and colder every time, till in a few days you come to perfectly cold water, and then continue it so, winter and summer. For it is to be observed in this, as in all other alterations from our ordinary way of living, the changes must be made by gentle and insensible degrees; and so we may bring our bodies to any thing, without pain, and without danger.

How fond mothers are like to receive this doctrine, is not hard to foresee.

* It is necessary, perhaps, here to remind the reader, that, to secure the advantage of a full and exact reprint of Mr. Locke's Thoughts, it was necessary to include several things which ought to be regarded rather as peculiarities of opinion, than as salutary suggestions.—Ed.

What can it be less than to murder their tender babes, to use them thus? What! put their feet in cold water in frost and snow, when all one can do is little enough to keep them warm! A little to remove their fears by examples, without which the plainest reason is seldom hearkened to; Seneca tells us of himself, ep. 53 and 83, that he used to bathe himself in cold spring-water in the midst of winter. This, if he had not thought it not only tolerable, but healthy too, he would scarce have done, in an exuberant fortune, that could well have borne the expense of a warm bath; and in an age, (for he was then old,) that would have excused greater indulgence. If we think his stoical principles led him to this severity; let it be so, that this sect reconciled cold water to his sufferance: what made it agreeable to his health? for that was not impaired by this hard usage. But what shall we say to Horace, who armed not himself with the reputation of any sect, and least of all affected stoical austerities? yet he assures us, he was wont in the winter season to bathe himself in cold water. But perhaps Italy will be thought much warmer than England, and the chillness of their waters not to come near ours in winter. If the rivers of Italy are warmer, those of Germany and Poland are much colder, than any in this our country; and yet in these the Jews, both men and women, bathe all over at all seasons of the year, without any prejudice to their health. And every one is not apt to believe it is a miracle, or any peculiar virtue of St. Winifred's well, that makes the cold waters of that famous spring do no harm to the tender bodies that bathe in it. Every one is now full of the miracles done, by cold baths, on decayed and weak constitutions, for the recovery of health and strength; and therefore they can not be impracticable, or intolerable, for the improving and hardening the bodies of those who are in better circumstances.

If these examples of grown men be not thought yet to reach the case of children, but that they may be judged still to be too tender and unable to bear such usage; let them examine what the Germans of old, and the Irish now do to them; and they will find that infants too, as tender as they are thought, may, without any danger, endure bathing, not only of their feet, but of their whole bodies in cold water. And there are, at this day, ladies in the Highlands of Scotland, who use this discipline to their children, in the midst of winter; and find that cold water does them no harm, even when there is ice in it.

SWIMMING.

8. I shall not need here to mention swimming, when he is of an age able to learn and has any one to teach him. It is that saves many a man's life: and the Romans thought it so necessary, that they ranked it with letters; and it was the common phrase to mark one ill educated, and good for nothing, that he had neither learned to read nor to swim: "*Nec literas didicit, nec natare.*" But besides the gaining of skill, which may serve him at need; the advantages to health, by often bathing in cold water, during the heat of summer, are so many, that I think nothing need be said to encourage it; provided this one caution be used, that he never go into the water when exercise has at all warmed him, or left any emotion in his blood or pulse.

AIR.

9. Another thing that is of great advantage to every one's health, but especially children's, is to be much in the open air, and very little, as may be, by the fire, even in winter. By this he will accustom himself also to heat and cold,

shine and rain; all which if a man's body will not endure, it will serve him to very little purpose in this world; and when he is grown up, it is too late to begin to use him to it: it must be got early and by degrees. Thus the body may be brought to bear almost any thing. If I should advise him to play in the wind and sun without a hat, I doubt whether it could be borne. There would a thousand objections be made against it, which at last would amount to no more, in truth, than being sun-burnt. And if my young master be to be kept always in the shade, and never exposed to the sun and wind, for fear of his complexion, it may be a good way to make him a beau, but not a man of business. And although greater regard be to be had to beauty in the daughters, yet I will take the liberty to say, that the more they are in the air, without prejudice to their faces, the stronger and healthier they will be; and the nearer they come to the hardships of their brothers in their education, the greater advantage will they receive from it, all the remaining part of their lives.

HABITS.

10. Playing in the open air has but this one danger in it, that I know; and that is, that when he is hot with running up and down, he should sit or lie down on the cold or moist earth. This, I grant, and drinking cold drink, when they are hot with labor or exercise, brings more people to the grave, or to the brink of it, by fevers and other diseases, than any thing I know. These mischiefs are easily enough prevented, whilst he is little; being then seldom out of sight. And if during his childhood he be constantly and rigorously kept from sitting on the ground, or drinking any cold liquor, whilst he is hot, the custom of forbearing, grown into a habit, will help much to preserve him, when he is no longer under his maid's or tutor's eye. This is all I think can be done in the case. For, as years increase, liberty must come with them; and, in a great many things, he must be trusted to his own conduct, since there can not always be a guard upon him; except what you put into his own mind, by good principles and established habits, which is the best and surest, and therefore most to be taken care of. For, from repeated cautions and rules, ever so often inculcated, you are not to expect any thing, either in this or any other case, farther than practice has established them into habit.

CLOTHES.

11. One thing the mention of the girls brings into my mind, which must not be forgot; and that is, that your son's clothes be never made strait, especially about the breast. Let nature have scope to fashion the body as she thinks best. She works of herself a great deal better and exacter than we can direct her. And if women were themselves to frame the bodies of their children in their wombs, as they often endeavor to mend their shapes when they are out, we should as certainly have no perfect children born, as we have few well-shaped, that are strait-laced, or much tampered with. This consideration should, methinks, keep busy people, (I will not say ignorant nurses and boddice-makers,) from meddling in a matter they understand not; and they should be afraid to put nature out of her way, in fashioning the parts, when they know not how the least and meanest is made. And yet I have seen so many instances of children receiving great harm from strait lacing, that I can not but conclude, there are other creatures, as well as monkeys, who, little wiser than they, destroy their young ones by senseless fondness, and too much embracing.

12. Narrow breasts, short and fetid breath, ill lungs, and crookedness, are the natural and almost constant effects of hard boddice, and clothes that pinch. That way of making slender waists, and fine shapes, serves but the more effectually to spoil them. Nor can there, indeed, but be disproportion in the parts, when the nourishment prepared in the several offices of the body, can not be distributed, as nature designs. And therefore, what wonder is it, if, it being laid where it can, or some part not so braced, it often makes a shoulder, or a hip, higher or bigger than its just proportion? It is generally known, that the women of China, (imagining I know not what kind of beauty in it,) by bracing and binding them hard from their infancy, have very little feet. I saw lately a pair of Chinese shoes, which I was told were for a grown woman; they were so exceedingly disproportioned to the feet of one of the same age amongst us, that they would scarce have been big enough for one of our little girls. Besides this, it is observed, that their women are also very little, and short-lived; whereas the men are of the ordinary stature of other men, and live to a proportionable age. These defects in the female sex of that country are by some imputed to the unreasonable binding of their feet; whereby the free circulation of the blood is hindered, and the growth and health of the whole body suffers. And how often do we see, that some small part of the foot being injured, by a wrench or a blow, the whole leg or thigh thereby loses its strength and nourishment, and dwindles away! How much greater inconveniences may we expect, when the thorax, wherein is placed the heart and seat of life, is unnaturally compressed, and hindered from its due expansion!

DIET.

13. As for his diet, it ought to be very plain and simple; and if I might advise, flesh should be forborne as long as he is in coats, or at least, till he is two or three years old. But whatever advantage this may be, to his present and future health and strength, I fear it will hardly be consented to, by parents, misled by the custom of eating too much flesh themselves; who will be apt to think their children, as they do themselves, in danger to be starved, if they have not flesh, at least twice a day. This I am sure, children would breed their teeth with much less danger, be freer from diseases, whilst they were little, and lay the foundations of an healthy and strong constitution much surer, if they were not crammed so much as they are, by fond mothers and foolish servants, and were kept wholly from flesh, the first three or four years of their lives.

But if my young master must needs have flesh, let it be but once a day, and of one sort at a meal. Plain beef, mutton, veal, &c., without other sauce than hunger, is best; and great care should be used, that he eat bread plentifully both alone and with every thing else. And whatever he eats, that is solid, make him chew it well. We English are often negligent herein; from whence follows indigestion, and other great inconveniences.

14. For breakfast and supper, milk, milk-pottage, water-gruel, flummery, and twenty other things, that we are wont to make in England, are very fit for children: only in all these let care be taken that they be plain, and without much mixture, and very sparingly seasoned with sugar, or rather none at all; especially allspice, and other things that may heat the blood, are carefully to be avoided. Be sparing also of salt, in the seasoning of all his victuals, and use him not to high-seasoned meats. Our palates grow into a relish and liking of

the seasoning and cookery, which by custom they are set to; and an over-much use of salt, besides that it occasions thirst, and over-much drinking, has other ill-effects upon the body. I should think that a good piece of well-made and well-baked brown bread, sometimes with, and sometimes without butter or cheese, would be often the best breakfast for my young master. I am sure it is as wholesome, and will make him as strong a man as greater delicacies: and if he be used to it, it will be as pleasant to him. If he at any time calls for victuals between meals, use him to nothing but dry bread. If he be hungry, more than wanton, bread alone will down; and if he be not hungry, it is not fit he should eat. By this you will obtain two good effects: 1. That by custom he will come to be in love with bread; for, as I said, our palates and stomachs too are pleased with the things we are used to. Another good you will gain hereby is, that you will not teach him to eat more nor oftener than nature requires. I do not think that all people's appetites are alike: some have naturally stronger, and some weaker stomachs. But this I think, that many are made gormands and gluttons by custom, that were not so by nature; and I see, in some countries, men as lusty and strong, that eat but two meals a day, as others that have set their stomachs by a constant usage, like larums, to call on them for four or five. The Romans usually fasted till supper; the only set meal, even of those who ate more than once a day; and those who used breakfasts, as some did at eight, some at ten, others at twelve of the clock, and some later, neither ate flesh, nor had any thing made ready for them. Augustus, when the greatest monarch on the earth, tells us, he took a bit of dry bread in his chariot. And Seneca, in his 83d epistle, giving an account how he managed himself, even when he was old, and his age permitted indulgence, says, that he used to eat a piece of dry bread for his dinner, without the formality of sitting to it: though his estate would have as well paid for a better meal, (had health required it,) as any subjects in England, were it doubled. The masters of the world were bred up with this spare diet; and the young gentlemen of Rome felt no want of strength or spirit, because they ate but once a day. Or if it happened by chance, that any one could not fast so long as till supper, their only set meal; he took nothing but a bit of dry bread, or at most a few raisins, or some such slight thing with it, to stay his stomach. This part of temperance was found so necessary, both for health and business, that the custom of only one meal a day held out against that prevailing luxury, which their Eastern conquests and spoils had brought in amongst them; and those, who had given up their old frugal eating, and made feasts, yet began them not till evening. And more than one set meal a day was thought so monstrous, that it was a reproach, as low down as Cæsar's time, to make an entertainment, or sit down to a full table, till toward sunset. And therefore, if it would not be thought too severe, I should judge it most convenient, that my young master should have nothing but bread too for breakfast. You can not imagine of what force custom is; and I impute a great part of our diseases in England to our eating too much flesh, and too little bread.

MEALS.

15. As to his meals, I should think it best, that as much as it can be conveniently avoided, they should not be kept constantly to an hour. For, when custom hath fixed his eating to certain stated periods, his stomach will expect victuals at the usual hour, and grow peevish if he passes it; either fretting itself

into a troublesome excess, or flagging into a downright want of appetite. Therefore I would have no time kept constantly to, for his breakfast, dinner, and supper, but rather varied, almost every day. And if, betwixt these, which I call meals, he will eat, let him have, as often as he calls for it, good dry bread. If any one think this too hard and sparing a diet for a child, let them know, that a child will never starve, nor dwindle for want of nourishment, who, besides flesh at dinner, and spoon-meat, or some such other thing at supper, may have good bread and beer, as often as he has a stomach; for thus, upon second thoughts, I should judge it best for children to be ordered. The morning is generally designed for study, to which a full stomach is but an ill preparation. Dry bread, though the best nourishment, has the least temptation; and nobody would have a child crammed at breakfast, who has any regard to his mind or body, and would not have him dull and unhealthy. Nor let any one think this unsuitable to one of estate and condition. A gentleman, in any age, ought to be so bred, as to be fitted to bear arms, and be a soldier. But he that in this, breeds his son so, as if he designed him to sleep over his life, in the plenty and ease of a full fortune he intends to leave him, little considers the examples he has seen, or the age he lives in.

DRINK.

16. His drink should be only small beer; and that too he should never be suffered to have between meals, but after he had eat a piece of bread. The reasons why I say this are these:

17. 1. More fevers and surfeits are got by people's drinking when they are hot, than by any one thing I know. Therefore, if by play he be hot and dry, bread will ill go down; and so, if he can not have drink, but upon that condition, he will be forced to forbear. For, if he be very hot, he should by no means drink. At least, a good piece of bread, first to be eaten, will gain time to warm the beer blood-hot, which then he may drink safely. If he be very dry, it will go down so warmed, and quench his thirst better; and, if he will not drink it so warmed, abstaining will not hurt him. Besides, this will teach him to forbear, which is an habit of greatest use for health of body and mind too.

18. 2. Not being permitted to drink without eating, will prevent the custom of having the cup often at his nose; a dangerous beginning and preparation to good fellowship. Men often bring habitual hunger and thirst on themselves by custom. And, if you please to try, you may, though he be weaned from it, bring him by use to such a necessity of drinking in the night, that he will not be able to sleep without it. It being the lullaby, used by nurses, to still crying children; I believe mothers generally find some difficulty to wean their children from drinking in the night, when they first take them home. Believe it, custom prevails as much by day as by night; and you may, if you please, bring any one to be thirsty every hour.

I once lived in a house, where, to appease a froward child, they gave him drink as often as he cried; so that he was constantly bibbing; and though he could not speak, yet he drank more in twenty-four hours than I did. Try it when you please, you may with small, as well as with strong beer, drink yourself into a drought. The great thing to be minded in education is, what habits you settle; and therefore in this, as all other things, do not begin to make any thing customary, the practice whereof you would not have continue and in-

crease. It is convenient for health and sobriety, to drink no more than natural thirst requires; and he that eats not salt meats, nor drinks strong drink, will seldom thirst between meals, unless he has been accustomed to such unseasonable drinking.

19. Above all, take great care that he seldom, if ever, taste any wine, or strong drink. There is nothing so ordinarily given children in England, and nothing so destructive to them. They ought never to drink any strong liquor, but when they need it as a cordial, and the doctor prescribes it. And in this case it is, that servants are most narrowly to be watched, and most severely to be reprehended, when they transgress. Those mean sort of people, placing a great part of their happiness in strong drink, are always forward to make court to my young master, by offering him that which they love best themselves; and, finding themselves made merry by it, they foolishly think it will do the child no harm. This you are carefully to have your eye upon, and restrain with all the skill and industry you can: there being nothing that lays a surer foundation of mischief, both to body and mind, than children's being used to strong drink; especially to drink in private with the servants.

FRUIT.

20. Fruit makes one of the most difficult chapters in the government of health, especially that of children. Our first parents ventured paradise for it; and it is no wonder our children can not stand the temptation, though it cost them their health. The regulation of this can not come under any one general rule; for I am by no means of their mind, would keep children almost wholly from fruit, as a thing totally unwholesome for them; by which strict way they make them but the more ravenous after it; and to eat good and bad, ripe or unripe, all that they can get, whenever they come at it. Melons, peaches, most sorts of plums, and all sorts of grapes in England, I think children should be wholly kept from, as having a very tempting taste, in a very unwholesome juice; so that, if it were possible, they should never so much as see them, or know there were any such thing. But strawberries, cherries, gooseberries, or currants, when thorough ripe, I think may be very safely allowed them, and that with a pretty liberal hand, if they be eaten with these cautions. 1. Not after meals, as we usually do, when the stomach is already full of other food. But I think they should be eaten rather before, or between meals, and children should have them for their breakfasts. 2. Bread eaten with them. 3. Perfectly ripe. If they are thus eaten, I imagine them rather conducing than hurtful to our health. Summer fruits, being suitable to the hot season of the year they come in, refresh our stomachs, languishing and fainting under it; and therefore I should not be altogether so strict in this point, as some are to their children; who being kept so very short, instead of a moderate quantity of well-chosen fruit, which being allowed them would content them, whenever they can get loose, or bribe a servant to supply them, satisfy their longing with any trash they can get, and eat to a surfeit.

Apples and pears too, which are thorough ripe, and have been gathered some time, I think may be safely eaten at any time, and in pretty large quantities; especially apples, which never did any body hurt, that I have heard, after October.

Fruits also dried without sugar I think very wholesome. But sweetmeats of all kinds are to be avoided; which, whether they do more harm to the maker

or eater, is not easy to tell. This I am sure, it is one of the most inconvenient ways of expense that vanity hath yet found out; and so I leave them to the ladies.

SLEEP.

21. Of all that looks soft and effeminate, nothing is more to be indulged children than sleep. In this alone they are to be permitted to have their full satisfaction; nothing contributing more to the growth and health of children than sleep. All that is to be regulated in it is, in what part of the twenty-four hours they should take it; which will easily be resolved, by only saying, that it is of great use to accustom them to rise early in the morning. It is best so to do, for health; and he that, from his childhood, has by a settled custom made rising betimes easy and familiar to him, will not, when he is a man, waste the best and most useful part of his life in drowsiness and lying a-bed. If children therefore are to be called up early in the morning, it will follow of course that they must go to bed betimes; whereby they will be accustomed to avoid the unhealthy and unsafe hours of debauchery, which are those of the evenings; and they who keep good hours seldom are guilty of any great disorders. I do not say this, as if your son, when grown up, should never be in company past eight, nor never chat over a glass of wine till midnight. You are now, by the accustoming of his tender years, to indispose him to those inconveniences as much as you can; and it will be no small advantage, that contrary practice having made sitting-up uneasy to him, it will make him often avoid, and very seldom propose midnight revels. But if it should not reach so far, but fashion and company should prevail, and make him live as others do above twenty, it is worth the while to accustom him to early rising and early going to bed, between this and that, for the present improvement of his health, and other advantages.

Though I have said a large allowance of sleep, even as much as they will take, should be made to children when they are little; yet I do not mean, that it should always be continued to them, in so large a proportion, and they suffered to indulge a drowsy laziness in their beds, as they grow up bigger. But whether they should begin to be restrained at seven, or ten years old, or any other time, is impossible to be precisely determined. Their tempers, strength, and constitutions must be considered: but some time between seven and fourteen, if they are too great lovers of their beds, I think it may be seasonable to begin to reduce them, by degrees, to about eight hours, which is generally rest enough for healthy grown people. If you have accustomed him, as you should do, to rise constantly very early in the morning, this fault of being too long in bed will easily be reformed; and most children will be forward enough to shorten that time themselves, by coveting to sit up with the company at night; though, if they be not looked after, they will be apt to take it out in the morning, which should by no means be permitted. They should constantly be called up, and made to rise at their early hour; but great care should be taken in waking them, that it be not done hastily, nor with a loud or shrill voice, or any other sudden violent noise. This often affrights children, and does them great harm. And sound sleep, thus broke off with sudden alarms, is apt enough to discompose any one. When children are to be wakened out of their sleep, be sure to begin with a low call, and some gentle motion; and so draw them out of it by degrees, and give them none but kind words and usage, till they are come perfectly to themselves, and being quite dressed you are sure they are thoroughly awake. The being forced from their sleep, how gently soever you do

it, is pain enough to them; and care should be taken not to add any other uneasiness to it, especially such as may terrify them.

BED.

22. Let his bed be hard, and rather quilts than feathers. Hard lodgings strengthens the parts; whereas being buried every night in feathers, melts and dissolves the body, is often the cause of weakness, and the forerunner of an early grave. And, besides the stone, which has often its rise from this warm wrapping of the reins, several other indispositions, and that which is the root of them all, a tender, weakly constitution, is very much owing to down beds. Besides, he that is used to hard lodging at home, will not miss his sleep, (where he has most need of it,) in his travels abroad, for want of his soft bed and his pillows laid in order. And therefore I think it would not be amiss, to make his bed after different fashions; sometimes lay his head higher, sometimes lower, that he may not feel every little change he must be sure to meet with, who is not designed to lie always in my young master's bed at home, and to have his maid lay all things in print, and tuck him in warm. The great cordial of nature is sleep. He that misses that, will suffer by it; and he is very unfortunate, who can take his cordial only in his mother's fine gilt cup, and not in a wooden dish. He that can sleep soundly, takes the cordial; and it matters not whether it be on a soft bed, or the hard boards. It is sleep only that is the thing necessary.

PHYSIC.

23. Perhaps it will be expected from me, that I should give some directions of physic, to prevent diseases; for which I have only this one, very sacredly to be observed: never to give children any physic for prevention. The observation of what I have already advised, will, I suppose, do that better than the ladies' diet-drinks, or apothecary's medicines. Have a great care of tampering that way, lest, instead of preventing, you draw on diseases. Nor even upon every little indisposition is physic to be given, or the physician to be called to children; especially if he be a busy man, that will presently fill their windows with gally-pots, and their stomachs with drugs. It is safer to leave them wholly to nature, than to put them into the hands of one forward to tamper, or that thinks children are to be cured in ordinary distempers by any thing but diet, or by a method very little distant from it: it seeming suitable both to my reason and experience, that the tender constitutions of children should have as little done to them as is possible, and as the absolute necessity of the case requires. A little cold stilled red poppy-water, which is the true surfeit-water, with ease, and abstinence from flesh, often puts an end to several distempers in the beginning, which, by too forward applications, might have been made lusty diseases. When such a gentle treatment will not stop the growing mischief, nor hinder it from turning into a formed disease, it will be time to seek the advice of some sober and discreet physician. I this part, I hope, I shall find an easy belief; and nobody can have a pretence to doubt the advice of one, who has spent some time in the study of physic, when he counsels you not to be too forward in making use of physic and physicians.

24. And thus I have done with what concerns the body and health, which reduces itself to these few and easily observable rules. Plenty of open air, exercise, and sleep; plain diet, no wine or strong drink, and very little or no physic; not too warm and strait clothing; especially the head and feet kept cold, and the feet often used to cold water and exposed to wet.

MORAL CULTURE.

25. Due care being had to keep the body in strength and vigor, so that it may be able to obey and execute the orders of the mind; the next and principal business is, to set the mind right, that on all occasions it may be disposed to consent to nothing but what may be suitable to the dignity and excellency of a rational creature.

26. If what I have said in the beginning of this discourse be true, as I do not doubt but it is, viz., that the difference to be found in the manners and abilities of men is owing more to their education than to any thing else; we have reason to conclude, that great care is to be had of the forming of children's minds, and giving them that seasoning early, which shall influence their lives always after. For when they do well or ill, the praise or blame will be laid there; and when any thing is done awkwardly, the common saying will pass upon them, that it is suitable to their breeding.

27. As the strength of the body lies chiefly in being able to endure hardships, so also does that of the mind. And the great principle and foundation of all virtue and worth is placed in this, that a man is able to deny himself his own desires, cross his own inclinations, and purely follow what reason directs as best, though the appetite lean the other way.

EARLY INFLUENCE.

28. The great mistake I have observed in people's breeding their children has been, that this has not been taken care enough of in its due season; that the mind has not been made obedient to discipline, and pliant to reason, when at first it was most tender, most easy to be bowed. Parents being wisely ordained by nature to love their children, are very apt, if reason watch not that natural affection very warily; are apt, I say, to let it run into fondness. They love their little ones, and it is their duty; but they often with them cherish their faults too. They must not be crossed, forsooth; they must be permitted to have their wills in all things; and they being in their infancies not capable of great vices, their parents think they may safely enough indulge their little irregularities, and make themselves sport with that pretty perverseness, which they think well enough becomes that innocent age. But to a fond parent, that would not have his child corrected for a perverse trick, but excused it, saying it was a small matter; Solon very well replied, "Ay, but custom is a great one."

29. The fondling must be taught to strike and call names; must have what he cries for, and do what he pleases. Thus parents, by humoring and cockering them when little, corrupt the principles of nature in their children, and wonder afterwards to taste the bitter waters, when they themselves have poisoned the fountain. For when their children are grown up, and these ill habits with them; when they are now too big to be dandled, and their parents can no longer make use of them as play-things; then they complain that the brats are untoward and perverse; then they are offended to see them wilful, and are troubled with those ill humors, which they themselves infused and fomented in them; and then, perhaps too late, would be glad to get out those weeds which their own hands have planted, and which now have taken too deep root to be easily extirpated. For he that has been used to have his will in every thing, as long as he was in coats, why should we think it strange that he should

desire it and contend for it still, when he is in breeches? Indeed, as he grows more towards a man, age shows his faults the more, so that there be few parents then so blind as not to see them; few so insensible as not to feel the ill effects of their own indulgence. He had the will of his maid before he could speak or go; he had the mastery of his parents ever since he could prattle; and why, now he is grown up, is stronger and wiser than he was then, why now of a sudden must he be restrained and curbed; why must he at seven, fourteen, or twenty years old, lose the privilege which the parents' indulgence, till then, so largely allowed him? Try it in a dog, or a horse, or any other creature, and see whether the ill and resty tricks they have learned when young are easily to be mended when they are knit: and yet none of those creatures are half so willful and proud, or half so desirous to be masters of themselves and others, as man.

30. We are generally wise enough to begin with them when they are very young; and discipline betimes those other creatures we would make useful and good for somewhat. They are only our own offspring, that we neglect in this point; and, having made them ill children, we foolishly expect they should be good men. For if the child must have grapes, or sugar-plums, when he has a mind to them, rather than make the poor baby cry, or be out of humor; why, when he is grown up, must he not be satisfied too, if his desires carry him to wine or women? They are objects as suitable to the longing of twenty-one or more years, as what he cried for, when little, was to the inclinations of a child. The having desires accommodated to the apprehensions and relish of those several ages is not the fault; but the not having them subject to the rules and restraints of reason: the difference lies not in the having or not having appetites, but in the power to govern, and deny ourselves in them. He that is not used to submit his will to the reason of others, when he is young, will scarce hearken or submit to his own reason, when he is of an age to make use of it. And what kind of a man such a one is like to prove, is easy to foresee.

31. These are oversights usually committed by those who seem to take the greatest care of their children's education. But, if we look into the common management of children, we shall have reason to wonder, in the great dissoluteness of manners which the world complains of, that there are any footsteps at all left to virtue. I desire to know what vice can be named, which parents, and those about children, do not season them with, and drop into them the seeds of, as often as they are capable to receive them? I do not mean by the examples they give, and the patterns they set before them, which is encouragement enough; but that which I would take notice of here, is the downright teaching them vice, and actual putting them out of the way of virtue. Before they can go, they principle them with violence, revenge and cruelty. "Give me a blow that I may beat him," is a lesson which most children every day hear: and it is thought nothing, because their hands have not strength enough to do any mischief. But, I ask, does not this corrupt their minds? is not this the way of force and violence, that they are set in? and if they have been taught when little to strike and hurt others by proxy, and encouraged to rejoice in the harm they have brought upon them, and see them suffer; are they not prepared to do it when they are strong enough to be felt themselves, and can strike to some purpose?

The coverings of our bodies, which are for modesty, warmth, and defense, are

by the folly or vice of parents, recommended to their children for other uses. They are made matter of vanity and emulation. A child is set a longing after a new suit, for the finery of it: and when the little girl is tricked up in her new gown and commode, how can her mother do less than teach her to admire herself, by calling her, "her little queen," and "her princess?" Thus the little ones are taught to be proud of their clothes before they can put them on. And why should they not continue to value themselves for this outside fashionableness of the tailor or the tire-woman's making, when their parents have so early instructed them to do so?

Lying and equivocations, and excuses little different from lying, are put into the mouths of young people, and commended in apprentices and children, whilst they are for their master's or parent's advantage. And can it be thought that he, that finds the straining of truth dispensed with, and encouraged, whilst it is for his godly master's turn, will not make use of that privilege for himself, when it may be for his own profit?

Those of the meaner sort are hindered by the straitness of their fortunes from encouraging intemperance in their children, by the temptation of their diet, or invitations to eat or drink more than enough: but their own ill examples, whenever plenty comes in their way, show that it is not the dislike of drunkenness and gluttony that keeps them from excess, but want of materials. But if we look into the houses of those who are a little warmer in their fortunes, there eating and drinking are made so much the great business and happiness of life, that children are thought neglected, if they have not their share of it. Sauces, and ragouts, and foods disguised by all the arts of cookery, must tempt their palates, when their bellies are full; and then, for fear the stomach should be overcharged, a pretense is found for the other glass of wine, to help digestion, though it only serves to increase the surfeit.

Is my young master a little out of order? the first question is, "What will my dear eat? what shall I get for thee?" Eating and drinking are instantly pressed: and every body's invention is set on work to find out something luscious and delicate enough to prevail over that want of appetite, which nature has wisely ordered in the beginning of distempers, as a defense against their increase; that, being freed from the ordinary labor of digesting any new load in the stomach, she may be at leisure to correct and master the peccant humors.

And where children are so happy in the care of their parents, as by their prudence to be kept from the excess of their tables, to the sobriety of a plain and simple diet; yet there too they are scarce to be preserved from the contagion that poisons the mind. Though by a discreet management, whilst they are under tuition, their healths, perhaps, may be pretty well secured; yet their desires must needs yield to the lessons, which every-where will be read to them upon this part of epicurism. The commendation that eating well has everywhere, can not fail to be a successful incentive to natural appetite, and bring them quickly to the liking and expense of a fashionable table. This shall have from every one, even the reprovers of vice, the title of living well. And what shall sullen reason dare to say against the public testimony? or can it hope to be heard, if it should call that luxury, which is so much owned and universally practised by those of the best quality?

This is now so grown a vice, and has so great supports, that I know not whether it do not put in for the name of virtue; and whether it will not be

thought folly, or want of knowledge of the world, to open one's mouth against it. And truly I should suspect, that what I have here said of it might be censured, as a little satire out of my way, did I not mention it with this view, that it might awaken the care and watchfulness of parents in the education of their children; when they see how they are beset on every side, not only with temptations, but instructors to vice, and that perhaps in those they thought places of security.

I shall not dwell any longer on this subject; much less run over all the particulars, that would show what pains are used to corrupt children, and instill principles of vice into them: but I desire parents soberly to consider what irregularity or vice there is which children are not visibly taught; and whether it be not their duty and wisdom to provide them other instructions.

CRAVING.

32. It seems plain to me, that the principle of all virtue and excellency lies in a power of denying ourselves the satisfaction of our own desires, where reason does not authorize them. This power is to be got and improved by custom, made easy and familiar by an early practice. If therefore I might be heard, I would advise, that, contrary to the ordinary way children should be used to submit their desires, and go without their longings, even from their very cradles. The very first thing they should learn to know, should be, that they were not to have any thing because it pleased them, but because it was thought fit for them. If things suitable to their wants were supplied to them so that they were never suffered to have what they once cried for, they would learn to be content without it; would never with bawling and peevishness contend for mastery; nor be half so uneasy to themselves and others as they are, because from the first beginning they are not thus handled. If they were never suffered to obtain their desire by the impatience they expressed for it, they would no more cry for other things than they do for the moon.

33. I say not this as if children were not to be indulged in any thing, or that I expected they should, in hanging-sleeves, have the reason and conduct of counsellors. I consider them as children, who must be tenderly used, who must play, and have play-things. That which I mean is, that whenever they craved what was not fit for them to have, or do, they should not be permitted it, because they were little and desired it: nay, whatever they were importunate for, they should be sure, for that very reason, to be denied. I have seen children at a table, who, whatever was there, never asked for any thing, but contentedly took what was given them: and at another place I have seen others cry for every thing they saw, must be served out of every dish, and that first too. What made this vast difference but this, that one was accustomed to have what they called or cried for, the other to go without it? The younger they are, the less, I think, are their unruly and disorderly appetites to be complied with; and the less reason they have of their own, the more are they to be under the absolute power and restraint of those in whose hands they are. From which I confess, it will follow, that none but discreet people should be about them. If the world commonly does otherwise, I can not help that. I am saying what I think should be; which, if it were already in fashion, I should not need to trouble the world with a discourse on this subject. But yet I doubt not but, when it is considered, there will be others of opinion with me, that the sooner

this way is begun with children, the easier it will be for them, and their governors too; and that this ought to be observed as an inviolable maxim, that whatever once is denied them, they are certainly not to obtain by crying or importunity; unless one has a mind to teach them to be impatient and troublesome, by rewarding them for it when they are so.

EARLY REGULATION.

34. Those, therefore, that intend ever to govern their children, should begin it whilst they are very little, and look that they perfectly comply with the will of their parents. Would you have your son obedient to you when past a child? Be sure then to establish the authority of a father, as soon as he is capable of submission, and can understand in whose power he is. If you would have him stand in awe of you, imprint it in his infancy; and, as he approaches more to a man, admit him nearer to your familiarity; so shall you have him your obedient subject (as is fit) whilst he is a child, and your affectionate friend when he is a man. For methinks they mightily misplace the treatment due to their children, who are indulgent and familiar when they are little, but severe to them and keep them at a distance, when they are grown up. For liberty and indulgence can do no good to children; their want of judgment makes them stand in need of restraint and discipline. And, on the contrary, imperiousness and severity is but an ill way of treating men, who have reason of their own to guide them, unless you have a mind to make your children, when grown up, weary of you, and secretly to say within themselves, "When will you die, father?"

35. I imagine every one will judge it reasonable, that their children, when little, should look upon their parents as their lords, their absolute governors; and as such stand in awe of them, and that when they come to riper years, they should look on them as their best, as their only sure friends, and as such love and reverence them. The way I have mentioned, if I mistake not, is the only one to obtain this. We must look upon our children, when grown up, to be like ourselves; with the same passions, the same desires. We would be thought rational creatures, and have our freedom; we love not to be uneasy under constant rebukes and brow-beatings; nor can we bear severe humors and great distance in those we converse with. Whoever has such treatment, when he is a man, will look out other company, other friends, other conversation, with whom he can be at ease. If therefore a strict hand be kept over children, from the beginning, they will in that age be tractable, and quietly submit to it, as never having known any other, and if, as they grow up to the use of reason, the rigor of government be, as they deserve it, gently relaxed, the father's brow more smoothed to them, and the distance by degrees abated, his former restraints will increase their love, when they find it was only a kindness for them, and a care to make them capable to deserve the favor of their parents and the esteem of every body else.

36. Thus much for the settling your authority over children in general. Fear and awe ought to give you the first power over their minds, and love and friendship in riper years to hold it; for the time must come when they will be past the rod and correction, and then, if the love of you make them not obedient and dutiful; if the love of virtue and reputation keep them not in laudable courses, I ask, what hold will you have upon them, to turn them to it? In-

deed, fear of having a scanty portion, if they displease you, may make them slaves to your estate, but they will be nevertheless ill and wicked in private, and that restraint will not last always. Every man must some time or other be trusted to himself, and his own conduct; and he that is a good, a virtuous, and able man, must be made so within. And, therefore, what he is to receive from education, what is to sway and influence his life, must be something put into him betimes; habits woven into the very principles of his nature, and not a counterfeit carriage, and dissembled outside, put on by fear, only to avoid the present anger of a father, who perhaps may disinherit him.

PUNISHMENTS.

37. This being laid down in general, as the course ought to be taken, it is fit we come now to consider the parts of the discipline to be used a little more particularly. I have spoken so much of carrying a strict hand over children, that perhaps I shall be suspected of not considering enough what is due to their tender age and constitutions. But that opinion will vanish, when you have heard me a little farther. For I am very apt to think, that great severity of punishment does but very little good; nay, great harm in education; and I believe that it will be found that cæteris paribus, those children who have been most chastised, seldom make the best men. All that I have hitherto contended for, is, that whatsoever rigor is necessary, it is more to be used, the younger children are; and, having by a due application wrought its effect, it is to be relaxed, and changed into a milder sort of government.

AWE.

38. A compliance and suppleness of their wills, being by a steady hand introduced by parents, before children have memories to retain the beginnings of it, will seem natural to them, and work afterwards in them as if it were so, preventing all occasions of struggling or repining. The only care is, that it be begun early, and inflexibly kept to, till awe and respect be grown familiar, and there appears not the least reluctancy in the submission, and ready obedience of their minds. When this reverence is once thus established (which it must be early, or else it will cost pains and blows to recover it, and the more the longer it is deferred,) it is by it, mixed still with as much indulgence, as they made not an ill use of, and not by beating, chiding, or other servile punishments, they are for the future to be governed, as they grow up to more understanding.

SELF-DENIAL.

39. That this is so, will be easily allowed, when it is but considered what is to be aimed at, in an ingenuous education, and upon what it turns.

1. He that has not a mastery over his inclinations, he that knows not how to resist the importunity of present pleasure or pain, for the sake of what reason tells him is fit to be done, wants the true principle of virtue and industry, and is in danger of never being good for any thing. This temper, therefore, so contrary to unguided nature, is to be got betimes; and this habit, as the true foundation of future ability and happiness, is to be wrought into the mind as early as may be, even from the first dawnings of any knowledge or apprehension in children, and so to be confirmed in them by all the care and ways imaginable, by those who have the oversight of their education.

DEJECTED.

40. 2. On the other side, if the mind be curbed and humbled too much in children; if their spirits be abased and broken much, by too strict a hand over them, they lose all their vigor and industry, and are in a worse state than the former. For extravagant young fellows, that have liveliness and spirit, come sometimes to be set right, and so make able and great men; but dejected minds, timorous and tame, and low spirits, are hardly ever to be raised, and very seldom attain to any thing. To avoid the danger that is on either hand is the great art, and he that has found a way how to keep up a child's spirit, easy, active, and free, and yet, at the same time, to restrain him from many things he has a mind to, and to draw him to many that are uneasy to him; he, I say, that knows how to reconcile these seeming contradictions, has, in my opinion, got the true secret of education.

BEATING.

41. The usual lazy and short way, chastisement, and the rod, which is the only instrument of government that tutors generally know, or ever think of, is the most unfit of any to be used in education; because it tends to both those mischiefs; which, as we have shown, are the Scylla and Charybdis, which on the one hand or the other, ruin all that miscarry.

42. 1. This kind of punishment contributes not at all to the mastery of our natural propensity to indulge corporal and present pleasure, and to avoid pain at any rate; but rather encourages it; and thereby strengthens that in us, which is the root from whence spring all vicious actions, and the irregularities of life. From what other motive, but of sensual pleasure and pain, does a child act, who drudges at his book against his inclination, or abstains from eating unwholesome fruit, that he takes pleasure in, only out of fear of whipping? He in this only prefers the greater corporal pleasure, or avoids the greater corporal pain. And what is it to govern his actions, and direct his conduct by such motives as these? What is it, I say, but to cherish that principle in him, which it is our business to root out and destroy? And, therefore, I can not think any correction useful to a child, where the shame of suffering for having done amiss, does not work more upon him, than the pain.

43. 2. This sort of correction naturally breeds an aversion to that, which it is the tutor's business to create a liking to. How obvious is it to observe, that children come to hate things which were at first acceptable to them, when they find themselves whipped, and chid, and teased about them? And it is not to be wondered at in them; when grown men would not be reconciled to any thing by such ways. Who is there that would not be disgusted with any innocent recreation, in itself indifferent to him, if he should with blows, or ill language be hauled to it, when he had no mind? or be constantly so treated, for some circumstance, in his application to it? This is natural to be so. Offensive circumstances ordinarily infect innocent things, which they are joined with. And the very sight of a cup, wherein any one uses to take nauseous physic, turns his stomach; so that nothing will relish well out of it, though the cup be ever so clean, and well shaped, and of the richest materials.

44. 3. Such a sort of slavish discipline makes a slavish temper. The child submits, and dissembles obedience, whilst the fear of the rod hangs over him; but when that is removed, and by being out of sight, he can promise himself

impunity, he gives the greater scope to his natural inclination; which by this way is not at all altered, but on the contrary heightened and increased in him; and after such restraint, breaks out usually with the more violence; or,

45. 4. If severity carried to the highest pitch does prevail, and works a cure upon the present unruly distemper, it is often bringing in the room of it, worse and more dangerous disease, by breaking the mind, and then in the place of a disorderly young fellow, you have a low-spirited, moped creature: who, however, with his unnatural sobriety he may please silly people, who commend tame, inactive children, because they make no noise, nor give them any trouble; yet, at last, will probably prove as uncomfortable a thing to his friends, as he will be, all his life, a useless thing to himself and others.

REWARDS.

46. Beating, then, and all other sorts of slavish and corporal punishments, are not the discipline fit to be used in the education of those who would have wise, good, and ingenuous men; and, therefore, very rarely to be applied, and that only in great occasions, and cases of extremity. On the other side, to flatter children by rewards of things, that are pleasant to them, is as carefully to be avoided. He that will give to his son apples, sugar-plums, or what else, of this kind, he is most delighted with, to make him learn his book, does but authorize his love of pleasure, and cocker up that dangerous propensity, which he ought by all means to subdue and stifle in him. You can never hope to teach him to master it, whilst you compound for the check you give his inclination in one place, by the satisfaction you propose to it in another. To make a good, a wise, and a virtuous man, it is fit he should learn to cross his appetite, and deny his inclination to riches, finery, or pleasing his palate, &c., whenever his reason advises the contrary, and his duty requires it. But when you draw him to do any thing that is fit, by the offer of money; or reward the pains of learning his book, by the pleasure of a luscious morsel; when you promise him a lace cravat, or a fine new suit, upon the performance of some of his little tasks; what do you by proposing these as rewards, but allow them to be the good things he should aim at, and thereby encourage his longing for them, and accustom him to place his happiness in them? Thus people, to prevail with children to be industrious about their grammar, dancing, or some other such matter, of no great moment to the happiness or usefulness of their lives, by misapplied rewards and punishments sacrifice their virtue, invert the order of their education, and teach them luxury, pride, or covetousness, &c. For in this way, flattering those wrong inclinations, which they should restrain and suppress, they lay the foundations of those future vices, which can not be avoided, but by curbing our desires, and accustoming them early to submit to reason.

47. I say not this, that I would have children kept from the conveniences or pleasures of life, that are not injurious to their health or virtue: on the contrary, I would have their lives made as pleasant, and as agreeable to them, as may be in a plentiful enjoyment of whatsoever might innocently delight them: provided it be with this caution, that they have those enjoyments, only as the consequences of the state of esteem and acceptation they are in with their parents and governors; but they should never be offered or bestowed on them, as the reward of this or that particular performance that they show an aversion to, or to which they would not have applied themselves without that temptation.

48. But if you take away the rod on one hand, and these little encourage-

ments, which they are taken with, on the other, how then, (will you say,) shall children be governed? Remove hope and fear, and there is an end of all discipline. I grant that good and evil, reward and punishment, are the only motives to a rational creature; these are the spur and reins, whereby all mankind are set on work, and guided, and, therefore, they are to be made use of to children too. For I advise their parents and governors always to carry this in their minds, that children are to be treated as rational creatures.

49. Rewards, I grant, and punishments must be proposed to children, if we intend to work upon them. The mistake I imagine, is, that those that are generally made use of, are ill chosen. The pains and pleasures of the body are, I think, of ill consequence, when made the rewards and punishments, whereby men would prevail on their children: for as I said before, they serve but to increase and strengthen those inclinations which it is our business to subdue and master. What principle of virtue do you lay in a child, if you will redeem his desires of one pleasure, by the proposal of another? This is but to enlarge his appetite, and instruct it to wander. If a child cries for an unwholesome and dangerous fruit, you purchase his quiet by giving him a less hurtful sweet meat. This perhaps may preserve his health; but spoils his mind, and sets that farther out of order. For here you only change the object; but flatter still his appetite, and allow that must be satisfied; wherein, as I have showed, lies the root of the mischief: and till you bring him to be able to bear a denial of that satisfaction, the child may at present be quiet and orderly, but the disease is not cured. By this way of proceeding you foment and cherish in him, that which is the spring from whence all the evil flows, which will be sure on the next occasion to break again out with more violence, give him stronger longings, and you more trouble.

REPUTATION.

50. The rewards and punishments, then, whereby we should keep children in order, are quite of another kind; and of that force, that when we can get them once to work, the business, I think, is done, and the difficulty is over. Esteem and disgrace are, of all others, the most powerful incentives to the mind, when once it is brought to relish them. If you can once get into children a love of credit, and an apprehension of shame and disgrace, you have put into them the true principle, which will constantly work, and incline them to the right. But it will be asked, how shall this be done?

I confess, it does not, at first appearance, want some difficulty; but yet I think it worth our while to seek the ways (and practice them when found) to attain this, which I look on as the great secret of education.

51. First, children (earlier perhaps than we think) are very sensible of praise and commendation. They find a pleasure in being esteemed and valued, especially by their parents, and those whom they depend on. If, therefore, the father caress and commend them, when they do well; show a cold and neglectful countenance to them upon doing ill; and this accompanied by a like carriage of the mother, and all others that are about them, it will in a little time make them sensible of the difference, and this if constantly observed, I doubt not but will of itself work more than threats or blows, which lose their force, when once grown common, and are of no use when shame does not attend them, and therefore are to be forborne, and never to be used but in the case hereafter mentioned, when it is brought to extremity.

52. But, secondly, to make the sense of esteem or disgrace sink the deeper, and be of the more weight, other agreeable or disagreeable things should constantly accompany these different states; not as particular rewards and punishments of this or that particular action, but as necessarily belonging to, and constantly attending one, who by his carriage has brought himself into a state of disgrace or commendation. By which way of treating them, children may as much as possible be brought to conceive, that those that are commended and in esteem for doing well, will necessarily be beloved and cherished by every body, and have all other good things as a consequence of it; and, on the other side, when any one by miscarriage falls into diseateem, and cares not to preserve his credit, he will unavoidably fall under neglect and contempt; and, in that state, the want of whatever might satisfy or delight him, will follow. In this way the objects of their desires are made assisting to virtue; when a settled experience from the beginning teaches children, that the things they delight in, belong to, and are to be enjoyed by those only, who are in a state of reputation. If by these means you can come once to shame them out of their faults, (for besides that, I would willingly have no punishment,) and make them in love with the pleasure of being well thought on, you may turn them as you please, and they will be in love with all the ways of virtue.

53. The great difficulty here is, I imagine, from the folly and perverseness of servants, who are hardly to be hindered from crossing herein the design of the father and mother. Children, discountenanced by their parents for any fault, find usually a refuge and relief in the caresses of those foolish flatterers, who thereby undo whatever the parents endeavor to establish. When the father or mother looks sour on the child, every body else should put on the same coldness to him, and nobody give him countenance, till forgiveness asked, and a reformation of his fault, has set him right again, and restored him to his former credit. If this were constantly observed, I guess there would be little need of blows or chiding: their own ease and satisfaction would quickly teach children to court commendation, and avoid doing that which they found every body condemned, and they were sure to suffer for, without being chid or beaten. This would teach them modesty and shame; and they would quickly come to have a natural abhorrence for that which they found made them slighted and neglected by every body. But how this inconvenience from servants is to be remedied, I must leave to parents' care and consideration. Only I think it of great importance, and that they are very happy, who can get discreet people about their children.

54. Frequent beating or chiding is therefore carefully to be avoided, because this sort of correction never produces any good, farther than it serves to raise shame and abhorrence of the miscarriage that brought it on them. And if the greatest part of the trouble be not the sense that they have done amiss, and the apprehension that they have drawn on themselves the just displeasure of their best friends, the pain of whipping will work but an imperfect cure. It only patches up for the present, and skins it over, but reaches not to the bottom of the sore. Ingenuous shame, and the apprehension of displeasure, are the only true restraints; these alone ought to hold the reins, and keep the child in order. But corporal punishments must necessarily lose that effect, and wear out the sense of shame, where they frequently return. Shame in children has the same place that modesty has in women, which can not be kept, and often trans-

gressed against. And as to the apprehension of displeasure in the parents, they will come to be insignificant, if the marks of that displeasure quickly cease, and a few blows fully expiate. Parents should well consider what faults in their children are weighty enough to deserve the declaration of their anger; but when their displeasure is once declared to a degree that carries any punishment with it, they ought not presently to lay by the severity of their brows, but to restore their children to their former grace with some difficulty, and delay a full reconciliation till their conformity, and more than ordinary merit, make good their amendment. If this be not so ordered, punishment will by familiarity become a mere thing of course, and lose all its influence; offending being chastised, and then forgiven, will be thought as natural and necessary as noon, night, and morning, following one another.

55. Concerning reputation, I shall only remark this one thing more of it; that, though it be not the true principle and measure of virtue, (for that is the knowledge of a man's duty, and the satisfaction it is to obey his Maker, in following the dictates of that light God has given him, with the hopes of acceptation and reward,) yet it is that which comes nearest to it, and being the testimony and applause that other people's reason, as it were, by a common consent, gives to virtuous and well-ordered actions, it is the proper guide and encouragement of children, till they grow able to judge for themselves, and to find what is right by their own reason.

56. This consideration may direct parents how to manage themselves in reproving and commending their children. The rebukes and chiding which their faults will sometimes make hardly to be avoided, should not only be in sober, grave, and unpassionate words, but also alone and in private; but the commendations children deserve they should receive before others. This doubles the reward, by spreading their praise; but the backwardness parents show in divulging their faults, will make them set a greater value on their credit themselves, and teach them to be the more careful to preserve the good opinion of others, whilst they think they have it; but when, being exposed to shame, by publishing their miscarriages, they give it up for lost, that check upon them is taken off, and they will be the less careful to preserve others' good thoughts of them, the more they suspect that their reputation with them is already blemished.

CHILDISHNESS.

57. But if a right course be taken with children, there will not be so much need of the application of the common rewards and punishments as we imagined, and as the general practice has established. For all their innocent folly, playing and childish actions, are to be left perfectly free and unrestrained, as far as they can consist with the respect due to those that are present, and that with the greatest allowance. If these faults of their age, rather than of the children themselves, were, as they should be, left only to time and imitation, and riper years to cure, children would escape a great deal of misapplied and useless correction, which either fails to overpower the natural disposition of their childhood, and so, by an ineffectual familiarity, makes correction in other necessary cases of less use; or else if it be of force to restrain the natural gayety of that age, it serves only to spoil the temper both of body and mind. If the noise and bustle of their play prove at any time inconvenient, or unsuitable to the

place or company they are in, (which can only be where their parents are,) a look or a word from the father or mother, if they have established the authority they should, will be enough either to remove, or quiet them for that time. But this gamesome humor, which is wisely adapted by nature to their age and temper, should rather be encouraged, to keep up their spirits, and improve their strength and health, than curbed or restrained; and the chief art is to make all that they have to do, sport and play too.

(To be continued.)

IX. THOUGHTS ON EDUCATION.

SELECTED FROM PUBLICATIONS BY HERBERT SPENCER.

I. PHYSICAL EDUCATION.*

IMPORTANCE OF PHYSICAL TRAINING.

1. To conform the regimen of the nursery and the school to the established truths of modern science—this is the desideratum. It is time that the benefits which our sheep and oxen have for years past derived from the investigations of the laboratory, should be participated in by our children. Without calling in question the great importance of horse-training and pig-feeding, we would suggest that, as the rearing of well-grown men and women is also of some moment, the conclusions indicated by theory, and indorsed by practice, ought to be acted on in the last case as in the first. Probably not a few will be startled—perhaps offended—by this collocation of ideas. But it is a fact not to be disputed, and to which we had best reconcile ourselves, that man is subject to the same organic laws as inferior creatures. No anatomist, no physiologist, no chemist, will for a moment hesitate to assert, that the general principles which rule over the vital processes in animals equally rule over the vital processes in man. And a candid admission of this fact is not without its reward: namely, that the truths established by observation and experiment on brutes, become more or less available for human guidance. Rudimentary as is the Science of Life, it has already attained to certain fundamental principles underlying the development of all organisms, the human included. That which has now to be done, and that which we shall endeavor in some measure to do, is to show the bearing of these fundamental principles upon the physical training of childhood and youth.

FOOD.

2. That over-feeding and under-feeding are both bad, is a truism. Of the two, however, the last is the worst. As writes a high authority, "the effects of casual repletion are less prejudicial, and more easily corrected, than those of inanition."† Add to which, that where there has been no injudicious interference, repletion will seldom occur. "Excess is the vice rather of adults than of the young, who are rarely either gourmands or epicures, unless through the fault of those who rear them."‡ This system of restriction which many parents think so necessary, is based upon very inadequate observation, and very erroneous reasoning. There is an over-legislation in the nursery, as well as an over-legislation in the state; and one of the most injurious forms of it is this limitation in the quantity of food.

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* From an article in the British Quarterly Review—republished as Chapter IV., in "*Education—Intellectual, Moral and Physical.*" Appleton. 1861.

† "*Cyclopædia of Practical Medicine.*" ‡ Ib.

"But are children to be allowed to surfeit themselves? Shall they be suffered to take their fill of dainties and make themselves ill, as they certainly will do?" As thus put, the question admits of but one reply. But as thus put, it assumes the point at issue. We contend that, as appetite is a good guide to all the lower creation—as it is a good guide to the infant—as it is a good guide to the invalid—as it is a good guide to the differently-placed races of men, and as it is a good guide for every adult who leads a healthful life; it may safely be inferred that it is a good guide for childhood. It would be strange indeed were it here alone untrustworthy.

SUGAR AND FRUIT IN CHILDREN'S DIET.

3. Consider the ordinary tastes and the ordinary treatment of children. The love of sweets is conspicuous and almost universal among them. Probably ninety-nine people in a hundred, presume that there is nothing more in this than gratification of the palate; and that, in common with other sensual desires, it should be discouraged. The physiologist, however, whose discoveries lead him to an ever-increasing reverence for the arrangements of things, will suspect that there is something more in this love of sweets than the current hypothesis supposes; and a little inquiry confirms the suspicion. Any work on organic chemistry shows that sugar plays an important part in the vital processes. Both saccharine and fatty matters are eventually oxidized in the body; and there is an accompanying evolution of heat. Sugar is the form to which sundry other compounds have to be reduced before they are available as heat-making food; and this *formation* of sugar is carried on in the body. Not only is starch changed into sugar in the course of digestion, but it has been proved by M. Claude Bernard that the liver is a factory in which other constituents of food are transformed into sugar. Now, when to the fact that children have a marked desire for this valuable heat-food, we join the fact that they have usually a marked dislike to that food which gives out the greatest amount of heat during its oxidation (namely, fat,) we shall see strong reason for thinking that excess of the one compensates for defect of the other—that the organism demands more sugar because it can not deal with much fat. Again, children are usually very fond of vegetable acids. Fruits of all kinds are their delight; and, in the absence of anything better, they will devour unripe gooseberries and the sourest of crabs. Now, not only are vegetable acids, in common with mineral ones, very good tonics, and beneficial as such when taken in moderation; but they have, when administered in their natural forms, other advantages. "Ripe fruit," says Dr. Andrew Combe, "is more freely given on the Continent than in this country; and, particularly when the bowels act imperfectly, it is often very useful." See, then, the discord between the instinctive wants of children and their habitual treatment. Here are two dominant desires, which there is good reason to believe express certain needs of the juvenile constitution; and not only are they ignored in the nursery regimen, but there is a general tendency to forbid the gratification of them. Bread-and-milk in the morning, tea and bread-and-butter at night, or some dietary equally insipid, is rigidly adhered to; and any ministration to the palate is thought not only needless but wrong. What is the necessary consequence? When, on fête-days there is an unlimited access to good things—when a gift of pocket-money brings the contents of the confectioner's window within reach, or when by some accident the free run of a fruit-

garden is obtained; then the long-denied, and therefore intense, desires lead to great excesses. There is an impromptu carnival, caused not only by the release from past restraints, but also by the consciousness that a long Lent will begin on the morrow. And then, when the evils of repletion display themselves, it is argued that children must not be left to the guidance of their appetites! These disastrous results of artificial restrictions, are themselves cited as proving the need for further restrictions! We contend, therefore, that the reasoning commonly used to justify this system of interference is vicious. We contend that, were children allowed daily to partake of these more sapid edibles, for which there is a physiological requirement, they would rarely exceed, as they now mostly do when they have the opportunity: were fruit, as Dr. Combe recommends, "to constitute a part of the regular food" (given, as he advises, not between meals, but along with them,) there would be none of that craving which prompts the devouring of such fruits as crabs and sloes. And similarly in other cases.

QUALITY OF FOOD FOR CHILDREN.

4. We have put the question to two of our leading physicians, and to several of the most distinguished physiologists, and they uniformly agree in the conclusion, that children should have a diet not *less* nutritive, but, if anything, *more* nutritive than that of adults.

The grounds for this conclusion are obvious, and the reasoning simple. It needs but to compare the vital processes of a man with those of a boy, to see at once that the demand for sustenance is relatively greater in the boy than in the man. What are the ends for which a man requires food? Each day his body undergoes more or less wear—wear through muscular exertion, wear of the nervous system through mental actions, wear of the viscera in carrying on the functions of life; and the tissue thus wasted has to be renewed. Each day, too, by perpetual radiation, his body loses a large amount of heat; and as, for the continuance of the vital actions, the temperature of the body must be maintained, this loss has to be compensated by a constant production of heat: to which end certain constituents of the food are unceasingly undergoing oxidation. To make up for the day's waste, and to supply fuel for the day's expenditure of heat, are, then, the sole purposes for which the adult requires food. Consider, now, the case of the boy. He, too, wastes the substance of his body by action; and it needs but to note his restless activity to see that, in proportion to his bulk, he probably wastes as much as a man. He, too, loses heat by radiation; and, as his body exposes a greater surface in proportion to its mass than does that of a man, and therefore loses heat more rapidly, the quantity of heat-food he requires is, bulk for bulk, greater than that required by a man. So that even had the boy no other vital processes to carry on than the man has, he would need, relatively to his size, a somewhat larger supply of nutriment. But, besides repairing his body and maintaining its heat, the boy has to make new tissue—to grow. After waste and thermal loss have been provided for, such surplus of nutriment as remains, goes to the further building up of the frame; and only in virtue of this surplus is normal growth possible—the growth that sometimes takes place in the absence of such surplus, causing a manifest prostration consequent upon defective repair. How peremptory is the demand of the unfolding organism for materials, is seen alike in that "school-boy hunger," which after-life rarely parallels in intensity, and in the comparatively quick re-

turn of appetite. And if there needs further evidence of this extra necessity for nutriment, we have it in the fact that during the famines following shipwrecks and other disasters, the children are the first to die.

This relatively greater need for nutriment being admitted, as it must perforce be, the question that remains is—shall we meet it by giving an excessive quantity of what may be called dilute food, or a more moderate quantity of concentrated food?

If we compare different classes of animals, or different races of men, or the same animals or men when differently fed, we find still more distinct proof that *the degree of energy essentially depends on the nutritiveness of the food.*

VARIETY OF FOOD.

5. It is a fact, established by numerous experiments, that there is scarcely any one food, however good, which supplies in due proportions or right forms all the elements required for carrying on the vital processes in a normal manner: from whence it is to be inferred that frequent change of food is desirable to balance the supply of all the elements. It is a further fact, well known to physiologists, that the enjoyment given by a much-liked food is a nervous stimulus, which, by increasing the action of the heart and so propelling the blood with increased vigor, aids in the subsequent digestion. And these truths are in harmony with the maxims of modern cattle-feeding, which dictate a rotation of diet.

Not only, however, is periodic change of food very desirable; but, for the same reasons, it is very desirable that a mixture of food should be taken at each meal. The better balance of ingredients, and the greater nervous stimulation, are advantages which hold here as before. If facts are asked for, we may name as one, the comparative ease with which the stomach disposes of a French dinner, enormous in quantity but extremely varied in material. Few will contend that an equal weight of one kind of food, however well cooked, could be digested with as much facility. If any desire further facts, they may find them in every modern book on the management of animals. Animals thrive best when each meal is made up of several things. And indeed, among men of science the truth has been long ago established. The experiments of Goss and Stark "afford the most decisive proof of the advantage, or rather the necessity, of a mixture of substances, in order to produce the compound which is the best adapted for the action of the stomach."*

CLOTHING.

6. There is a current theory, vaguely entertained, if not put into a definite formula, that the sensations are to be disregarded. They do not exist for our guidance, but to mislead us, seems to be the prevalent belief reduced to its naked form. It is a grave error: we are much more beneficently constituted. It is not obedience to the sensations, but disobedience to them, which is the habitual cause of bodily evils.

Among the sensations serving for our guidance are those of heat and cold; and a clothing for children which does not carefully consult these sensations is to be condemned. The common notion about "hardening" is a grievous delusion. Children are not unfrequently "hardened" out of the world; and those

* "*Cyclopædia of Anatomy and Physiology.*"

who survive, permanently suffer either in growth or constitution. "Their delicate appearance furnishes ample indication of the mischief thus produced, and their frequent attacks of illness might prove a warning even to unreflecting parents," says Dr. Combe. The reasoning on which this hardening theory rests is extremely superficial. Wealthy parents, seeing little peasant boys and girls playing about in the open air only half-clothed, and joining with this fact the general healthiness of laboring people, draw the unwarrantable conclusion that the healthiness is the result of the exposure, and resolve to keep their own offspring scantily covered! It is forgotten that these urchins who gambol upon village-greens are in many respects favorably circumstanced—that their days are spent in almost perpetual play; that they are always breathing fresh air; and that their systems are not disturbed by over-taxed brains. For aught that appears to the contrary, their good health may be maintained, not in consequence of, but in spite of, their deficient clothing. This alternative conclusion we believe to be the true one; and that an inevitable detriment results from the needless loss of animal heat to which they are subject.

For when, the constitution being sound enough to bear it, exposure does produce hardness, it does so at the expense of growth. This truth is displayed alike in animals and in man. The Shetland pony bears greater inclemencies than the horses of the south, but is dwarfed. Highland sheep and cattle, living in a colder climate, are stunted in comparison with English breeds. In both the arctic and antarctic regions the human race falls much below its ordinary height.

Excessive expenditure for fuel entails diminished means for other purposes: wherefore there necessarily results a body small in size, or inferior in texture, or both.

As Liebig says:—"Our clothing is, in reference to the temperature of the body, merely an equivalent for a certain amount of food." By diminishing the loss of heat, it diminishes the amount of fuel needful for maintaining the heat; and when the stomach has less to do in preparing fuel, it can do more in preparing other materials. This deduction is entirely confirmed by the experience of those who manage animals. Cold can be borne by animals only at an expense of fat, or muscle, or growth, as the case may be. "If fattening cattle are exposed to a low temperature, either their progress must be retarded, or a great additional expenditure of food incurred."* Mr. Apperley insists strongly that, to bring hunters into good condition, it is necessary that the stable should be kept warm. And among those who rear racers, it is an established doctrine that exposure is to be avoided.

"The rule is, therefore, not to dress in an invariable way in all cases, but to put on clothing in kind and quantity *sufficient in the individual case to protect the body effectually from an abiding sensation of cold, however slight.*" This rule, the importance of which Dr. Combe indicates by the italics, is one in which men of science and practitioners agree. We have met with none competent to form a judgment on the matter, who do not strongly condemn the exposure of children's limbs. If there is one point above others in which "pestilent custom" should be ignored, it is this.

Our conclusions are, then—that, while the clothing of children should never be in such excess as to create oppressive warmth, it should always be sufficient

* Morton's "*Cyclopædia of Agriculture.*"

to prevent any general feeling of cold; that instead of the flimsy cotton, linen, or mixed fabrics commonly used, it should be made of some good non-conductor, such as coarse woollen cloth; that it should be so strong as to receive little damage from the hard wear and tear which childish sports will give it; and that its color should be such as will not soon suffer from use and exposure.

EXERCISE.

7. Perhaps less needs saying on this requisite of physical education than on most others: at any rate, in so far as boys are concerned. Public schools and private schools alike furnish tolerably adequate playgrounds; and there is usually a fair share of time for out-of-door games, and a recognition of them as needful. In this, if in no other direction, it seems admitted that the natural promptings of boyish instinct may advantageously be followed; and, indeed, in the modern practice of breaking the prolonged morning and afternoon's lessons by a few minutes' open-air recreation, we see an increasing tendency to conform school regulations to the bodily sensations of the pupils. Here, then, little needs to be said in the way of expostulation or suggestion.

But we have been obliged to qualify this admission by inserting the clause "in so far as boys are concerned." Unfortunately, the fact is quite otherwise in the case of girls.

Why this astonishing difference? Is it that the constitution of a girl differs so entirely from that of a boy as not to need these active exercises? Is it that a girl has none of the promptings to vociferous play by which boys are impelled? Or is it that, while in boys these promptings are to be regarded as securing that bodily activity without which there can not be adequate development, to their sisters nature has given them for no purpose whatever—unless it be for the vexation of schoolmistresses?

"Then girls should be allowed to run wild—to become as rude as boys, and grow up into romps and hoydens!" exclaims some defender of the proprieties. This, we presume, is the ever-present dread of schoolmistresses. It appears, on inquiry, that at "Establishments for Young Ladies" noisy play like that daily indulged in by boys, is a punishable offense; and it is to be inferred that this noisy play is forbidden, lest unlady-like habits should be formed. The fear is quite goundless, however. For if the sportive activity allowed to boys does not prevent them from growing up into gentlemen; why should a like sportive activity allowed to girls prevent them from growing up into ladies? Rough as may have been their accustomed playground frolics, youths who have left school do not indulge in leapfrog in the street, or marbles in the drawing-room. Abandoning their jackets, they abandon at the same time boyish games; and display an anxiety—often a ludicrous anxiety—to avoid whatever is not manly. If now, on arriving at the due age, this feeling of masculine dignity puts so efficient a restraint on the romping sports of boyhood, will not the feeling of feminine modesty, gradually strengthening as maturity is approached, put an efficient restraint on the like sports of girlhood? Have not women even a greater regard for appearances than men? and will there not consequently arise in them even a stronger check to whatever is rough or boisterous? How absurd is the supposition that the womanly instincts would not assert themselves but for the rigorous discipline of schoolmistresses!

The natural spontaneous exercise having been forbidden, and the bad consequences of no exercise having become conspicuous, there has been adopted a

system of factitious exercise—gymnastics. That this is better than nothing we admit; but that it is an adequate substitute for play we deny. The defects are both positive and negative. In the first place, these formal, muscular motions, necessarily much less varied than those accompanying juvenile sports, do not secure so equable a distribution of action to all parts of the body; whence it results that the exertion, falling on special parts, produces fatigue sooner than it would else have done: add to which, that, if constantly repeated, this exertion of special parts leads to a disproportionate development. Again, the quantity of exercise thus taken will be deficient, not only in consequence of uneven distribution, but it will be further deficient in consequence of lack of interest. Even when not made repulsive, as they sometimes are, by assuming the shape of appointed lessons, these monotonous movements are sure to become wearisome, from the absence of amusement. Competition it is true, serves as a stimulus; but it is not a lasting stimulus, like that enjoyment which accompanies varied play. Not only, however, are gymnastics inferior in respect of the *quantity* of muscular exertion which they secure; they are still more inferior in respect of the *quality*. This comparative want of enjoyment to which we have just referred as a cause of early desistance from artificial exercises, is also a cause of inferiority in the effects they produce on the system. The common assumption that so long as the amount of bodily action is the same, it matters not whether it be pleasurable or otherwise, is a grave mistake. An agreeable mental excitement has a highly invigorating influence. See the effect produced upon an invalid by good news, or by the visit of an old friend. Mark how careful medical men are to recommend lively society to debilitated patients. Remember how beneficial to the health is the gratification produced by change of scene. The truth is that happiness is the most powerful of tonics. By accelerating the circulation of the blood, it facilitates the performance of every function; and so tends alike to increase health when it exists, and to restore it when it has been lost. Hence the essential superiority of play to gymnastics. The extreme interest felt by children in their games, and the riotous glee with which they carry on their rougher frolics, are of as much importance as the accompanying exertion. And as not supplying these mental stimuli, gymnastics must be fundamentally defective.

Granting then, as we do, that formal exercises of the limbs are better than nothing—granting, further, that they may be used with advantage as supplementary aids; we yet contend that such formal exercises can never supply the place of the exercises prompted by nature. For girls, as well as boys, the sportive activities to which the instincts impel, are essential to bodily welfare. Whoever forbids them, forbids the divinely-appointed means to physical development.

EXCESS OF MENTAL ACTIVITY.

8. On old and young, the pressure of modern life puts a still-increasing strain. In all businesses and professions, intenser competition taxes the energies and abilities of every adult; and, with the view of better fitting the young to hold their place under this intenser competition, they are subject to a more severe discipline than heretofore. The damage is thus doubled. Fathers, who find not only that they are run hard by their multiplying competitors, but that, while laboring under this disadvantage, they have to maintain a more expensive style of living, are all the year round obliged to work early and late, taking little exercise and get-

ting but short holidays. The constitutions, shaken by this long continued over-application, they bequeath to their children. And then these comparatively feeble children, predisposed as they are to break down even under an ordinary strain upon their energies, are required to go through a *curriculum* much more extended than that prescribed for the unenfeebled children of past generations.

That disastrous consequences must result from this cumulative transgression might be predicted with certainty; and that they do result, every observant person knows. Go where you will, and before long there come under your notice cases of children, or youths, of either sex, more or less injured by undue study. Here, to recover from a state of debility thus produced, a year's rustication has been found necessary. There you find a chronic congestion of the brain, that has already lasted many months, and threatens to last much longer. Now you hear of a fever that resulted from the over-excitement in some way brought on at school. And, again, the instance is that of a youth who has already had once to desist from his studies, and who, since he has returned to them, is frequently taken out of his class in a fainting fit. We state facts—facts that have not been sought for, but have been thrust upon our observation during the last two years: and that, too, within a very limited range.

If injuries so conspicuous are thus frequent, how very general must be the smaller and inconspicuous injuries. To one case where positive illness is directly traceable to over-application, there are probably at least half-a-dozen cases where the evil is unobtrusive and slowly accumulating—cases where there is frequent derangement of the functions, attributed to this or that special cause, or to constitutional delicacy; cases where there is retardation and premature arrest of bodily growth; cases where a latent tendency to consumption is brought out and established; cases where a predisposition is given to that now common cerebral disorder brought on by the hard work of adult life. How commonly constitutions are thus undermined, will be clear to all who, after noting the frequent ailments of hard-worked professional and mercantile men, will reflect on the disastrous effects which undue application must produce upon the undeveloped systems of the young. The young are competent to bear neither as much hardship, nor as much physical exertion, nor as much mental exertion, as the full grown. Judge, then, if the full grown so manifestly suffer from the excessive mental exertion required of them, how great must be the damage which a mental exertion, often equally excessive, inflicts upon the young!

Most parents are more or less aware of the evil consequences that follow infant precocity. In every society may be heard reprobation of those who too early stimulate the minds of their little ones. And the dread of this early stimulation is great in proportion as there is adequate knowledge of the effects: witness the implied opinion of one of our most distinguished professors of physiology, who told us that he did not intend his little boy to learn any lessons until he was eight years old. But while to all it is a familiar truth that a forced development of intelligence in childhood entails disastrous results—either physical feebleness, or ultimate stupidity, or early death—it appears not to be perceived that throughout youth the same truth holds. Yet it is certain that it must do so. There is a given order in which, and a given rate at which, the faculties unfold. If the course of education conforms itself to that of order and rate, well. If not—if the higher faculties are early taxed by presenting an order of knowledge more complex and abstract than can be readily assimilated; or if, by excess of culture, the intellect in general is developed to a degree

beyond that which is natural to the age; the abnormal result so produced will inevitably be accompanied by some equivalent, or more than equivalent, evil.

For Nature is a strict accountant; and if you demand of her in one direction more than she is prepared to lay out, she balances the account by making a deduction elsewhere. If you will let her follow her own course, taking care to supply, in right quantities and kinds, the raw materials of bodily and mental growth required at each age, she will eventually produce an individual more or less evenly developed. If, however, you insist on premature or undue growth of any one part, she will, with more or less protest, concede the point; but that she may do your extra work, she must leave some of her more important work undone. Let it never be forgotten that the amount of vital energy which the body at any moment possesses is limited; and that, being limited, it is impossible to get from it more than a fixed quantity of results. In a child or youth the demands upon this vital energy are various and urgent. As before pointed out, the waste consequent on the day's bodily exercise has to be repaired; the wear of brain entailed by the day's study has to be made good; a certain additional growth of body has to be provided for; and also a certain additional growth of brain: add to which the amount of energy absorbed in the digestion of the large quantity of food required for meeting these many demands. Now, that to divert an excess of energy into any one of these channels is to abstract it from the others, is not only manifest *à priori*, but may be shown *à posteriori* from the experience of every one. Every one knows, for instance, that the digestion of a heavy meal makes such a demand on the system as to produce lassitude of mind and body, ending not unfrequently in sleep. Every one knows, too, that excess of bodily exercise diminishes the power of thought—that the temporary prostration following any sudden exertion, or the fatigue produced by a thirty miles' walk, is accompanied by a disinclination to mental effort; that, after a month's pedestrian tour, the mental inertia is such that some days are required to overcome it; and that in peasants who spend their lives in muscular labor the activity of mind is very small. Again, it is a truth familiar to all that during those fits of extreme rapid growth which sometimes occur in childhood, the great abstraction of energy is shown in the attendant prostration, bodily and mental. Once more, the facts that violent muscular exertion after eating will stop digestion, and that children who are early put to hard labor become stunted, similarly exhibit the antagonism—similarly imply that excess of activity in one direction involves deficiency of it in other directions. Now, the law which is thus manifest in extreme cases holds in all cases. These injurious abstractions of energy as certainly take place when the undue demands are slight and constant, as when they are great and sudden. Hence, if in youth, the expenditure in mental labor exceeds that which nature had provided for; the expenditure for other puposes falls below what it should have been: and evils of one kind or other are inevitably entailed.

It is a physiological law, first pointed out by M. Isidore St. Hilaire, and to which attention has been drawn by Mr. Lewes in his essay on *Dwarfs and Giants*, that there is an antagonism between *growth* and *development*. By growth, as used in this antithetical sense, is to be understood *increase of size;* by development, *increase of structure*. And the law is, that great activity in either of these processes involves retardation or arrest of the other.

This law is true not only of the organism as a whole, but of each separate

part. The abnormally rapid advance of any part in respect of structure involves premature arrest of its growth; and this happens with the organ of the mind as certainly as with any other organ. The brain, which during early years is relatively large in mass but imperfect in structure will, if required to perform its functions with undue activity, undergo a structural advance greater than is appropriate to the age; but the ultimate effect will be a falling short of the size and power that would else have been attained. And this is a part cause—probably the chief cause—why precocious children, and youths who up to a certain time were carrying all before them, so often stop short and disappoint the high hopes of their parents.

But these results of over-education, disastrous as they are, are perhaps less disastrous than the results produced upon the health—the undermined constitution, the enfeebled energies, the morbid feelings. Recent discoveries in physiology have shown how immense is the influence of the brain over the functions of the body. The digestion of the food, the circulation of the blood, and through these all other organic processes, are profoundly affected by cerebral excitement. Whoever has seen repeated, as we have, the experiment first performed by Weber, showing the consequence of irritating the *vagus* nerve which connects the brain with the viscera—whoever has seen the action of the heart suddenly arrested by the irritation of this nerve; slowly recommencing when the irritation is suspended; and again arrested the moment it is renewed; will have a vivid conception of the depressing influence which an over-wrought brain exercises on the body.

More or less of this constitutional disturbance will inevitably follow an exertion of brain beyond that which nature had provided for; and when not so excessive as to produce absolute illness, is sure to entail a slowly accumulating degeneracy of *physique*. With a small and fastidious appetite, an imperfect digestion, and an enfeebled circulation, how can the developing body flourish? The due performance of every vital process depends on the adequate supply of good blood. Without enough good blood, no gland can secrete properly, no viscus can fully discharge its office. Without enough of good blood, no nerve, muscle, membrane, or other tissue can be efficiently repaired. Without enough good blood, growth will neither be sound nor sufficient. Judge, then, how bad must be the consequences when to a growing body the weakened stomach supplies blood that is deficient in quantity and poor in quality; while the debilitated heart propels this poor and scanty blood with unnatural slowness.

We contend, then, that this over-education is vicious in every way—vicious, as giving knowledge that will soon be forgotten; vicious, as producing a disgust for knowledge; vicious, as neglecting that organization of knowledge which is more important than its acquisition; vicious, as weakening or destroying that energy, without which a trained intellect is useless: vicious, as entailing that ill-health for which even success would not compensate, and which makes failure doubly bitter.

On women the effects of this forcing system are, if possible, even more injurious than on men. Being in great measure debarred from those vigorous and enjoyable exercises of body by which boys mitigate the evils of excessive study, girls feel these evils in their full intensity. Hence, the much smaller proportion of them who grow up well made and healthy.

It needs but to remember that one of Nature's ends, or rather her supreme end, is the welfare of posterity—it needs but to remember that, in so far as

posterity are concerned, a cultivated intelligence based upon a bad *physique* is of little worth, seeing that its descendants will die out in a generation or two—it needs but to bear in mind that a good *physique*, however poor the accompanying mental endowments, is worth preserving, because, throughout future generations, the mental endowments may be indefinitely developed—it needs but to contemplate these truths, to see how important is the balance of instincts above described. But, purpose apart, the instincts being thus balanced, it is a fatal folly to persist in a system which undermines a girl's constitution that it may overload her memory. Educate as highly as possible—the higher the better—providing no bodily injury is entailed (and we may remark, in passing, that a high standard might be so reached were the parrot-faculty cultivated less, and the human faculty more, and were the discipline extended over that now wasted period between leaving school and being married.) But to educate in such a manner, or to such extent, as to produce physical degeneracy, is to defeat the chief end for which the toil and cost and anxiety are submitted to.

GENERAL RESULTS OF MODERN PHYSICAL TREATMENT.

9. Our general conclusion is, that the ordinary treatment of children in various ways, is seriously prejudicial. It errs in deficient feeding; in deficient clothing; in deficient exercise (among girls at least;) and in excessive mental application. Considering the *régime* as a whole, its tendency is too exacting: it asks too much and gives too little. In the extent to which it taxes the vital energies, it make the juvenile life much more like the adult life than it should be. It overlooks the truth that, as in the fœtus the entire vitality is expended in the direction of growth—as in the infant, the expenditure of vitality in growth is so great as to leave extremely little for either physical or mental action; so throughout childhood and youth growth is the dominant requirement to which all others must be subordinated: a requirement which dictates the giving much and the taking away of little—a requirement which, therefore, restricts the exertion of body and mind to a degree proportionate to the rapidity of growth—a requirement which permits the mental and physical activities to increase only as fast as the rate of growth diminishes.

Regarded from another point of view, this high-pressure education manifestly results from our passing phase of civilization. In primitive times, when aggression and defense were the leading social activities, bodily vigor with its accompanying courage were the desiderata; and then education was almost wholly physical: mental cultivation was little cared for, and indeed, as in our own feudal ages, was often treated with contempt. But now that our state is relatively peaceful—now that muscular power is of use for little else than manual labor, while social success of nearly every kind depends very much on mental power; our education has become almost exclusively mental. Instead of respecting the body and ignoring the mind, we now respect the mind and ignore the body. Both these attitudes are wrong. We do not yet sufficiently realize the truth that as, in this life of ours, the physical underlies the mental, the mental must not be developed at the expense of the physical. The ancient and modern conceptions must be combined.

PRESERVATION OF HEALTH A DUTY.

10. Few seem conscious that there is such a thing as physical morality. Men's habitual words and acts imply the idea that they are at liberty to treat their

bodies as they please. Disorders entailed by disobedience to Nature's dictates, they regard simply as grievances: not as the effects of a conduct more or less flagitious. Though the evil consequences inflicted on their dependents, and on future generations, are often as great as those caused by crime; yet they do not think themselves in any degree criminal. It is true, that, in the case of drunkenness, the viciousness of a purely bodily transgression is recognized; but none appear to infer that, if this bodily transgression is vicious, so too is every bodily transgression. The fact is, that all breaches of the laws of health are *physical sins*. When this is generally seen, then, and perhaps not till then, will the physical training of the young receive all the attention it deserves.

II. MORAL EDUCATION.

SPECIAL PREPARATION NECESSARY FOR THE MANAGEMENT OF CHILDREN.

1. To prepare the young for the duties of life is tacitly admitted by all to be the end which parents and schoolmasters should have in view; and happily the value of the things taught, and the goodness of the method followed in teaching them, are now ostensibly judged by their fitness to this end. The propriety of substituting for an exclusively classical training a training in which the modern languages shall have a share, is argued on this ground. The necessity of increasing the amount of science is urged for like reasons. But though some care is taken to fit youth of both sexes for society and citizenship, no care whatever is taken to fit them for the still more important position they will ultimately have to fill—the position of parents. While it is seen that for the purpose of gaining a livelihood, an elaborate preparation is needed, it appears to be thought that for the bringing up of children, no preparation whatever is needed. While many years are spent by a boy in gaining knowledge, of which the chief value is that it constitutes "the education of a gentleman;" and while many years are spent by a girl in those decorative acquirements which fit her for evening parties; not an hour is spent by either of them in preparation for that gravest of all responsibilities—the management of a family. Is it that this responsibility is but a remote contingency? On the contrary, it is certain to devolve on nine out of ten. Is it that the discharge of it is easy? Certainly not: of all functions which the adult has to fulfill this is the most difficult. Is it that each may be trusted by self-instruction to fit himself, or herself, for the office of parent? No: not only is the need for such self-instruction unrecognized, but the complexity of the subject renders it the one of all others in which self-instruction is least likely to succeed. No rational plea can be put forward for leaving the Art of Education out of our *curriculum*. Whether as bearing upon the happiness of parents themselves, or whether as affecting the characters and lives of their children and remote descendants, we must admit that a knowledge of the right methods of juvenile culture, physical, intellectual, and moral, is a knowledge second to none in importance. This topic should occupy the highest and last place in the course of instruction passed through by each man and woman. As physical maturity is marked by the ability to produce offspring, so mental maturity is marked by the ability to train those offspring. *The subject which involves all other subjects, and therefore the subject in which the education of every one should culminate, is the Theory and Practice of Education.*

In the absence of this preparation, the management of children, and more

especially the moral management, is lamentably bad. Parents either never think about the matter at all, or else their conclusions are crude and inconsistent. In most cases, and especially on the part of mothers, the treatment adopted on every occasion is that which the impulse of the moment prompts: it springs not from any reasoned-out conviction as to what will most conduce to the child's welfare, but merely expresses the passing parental feelings, whether good or ill; and varies from hour to hour as these feelings vary. Or if these blind dictates of passion are supplemented by any definite doctrines and methods, they are those that have been handed down from the past, or those suggested by the remembrances of childhood, or those adopted from nurses and servants—methods devised not by the enlightenment, but by the ignorance of the time.

The great error made by those who discuss questions of juvenile discipline, is in ascribing all the faults and difficulties to the children, and none to the parents. The current assumption respecting family government, as respecting national government, is, that the virtues are with the rulers and the vices with the ruled. Judging by educational theories, men and women are entirely transfigured in the domestic relation. The citizens we do business with, the people we meet in the world, we all know to be very imperfect creatures. In the daily scandals, in the quarrels of friends, in bankruptcy disclosures, in lawsuits, in police reports, we have constantly thrust before us the pervading selfishness, dishonesty, brutality. Yet when we criticise nursery management, and canvass the misbehavior of juveniles, we habitually take for granted that these culpable men and women are free from moral delinquency in the treatment of their offspring! So far is this from the truth, that we do not hesitate to say that to parental misconduct is traceable a great part of the domestic disorder commonly ascribed to the perversity of children. We do not assert this of the more sympathetic and self-restrained, among whom we hope most of our readers may be classed, but we assert it of the mass. What kind of moral discipline is to be expected from a mother who, time after time, angrily shakes her infant because it will not suckle her, which we once saw a mother do? How much love of justice and generosity is likely to be instilled by a father who, on having his attention drawn by his child's scream to the fact that its finger is jammed between the window sash and the sill, forthwith begins to beat the child instead of releasing it? Yet that there are such fathers is testified to us by an eye-witness. Or, to take a still stronger case, also vouched for by direct testimony—what are the educational prospects of the boy who, on being taken home with a dislocated thigh, is saluted with a castigation? It is true that these are extreme instances—instances exhibiting in human beings that blind instinct which impels brutes to destroy the weakly and injured of their own race. But extreme though they are, they typify feelings and conduct daily observable in many families. Who has not repeatedly seen a child slapped by nurse or parent for a fretfulness probably resulting from bodily derangement? Who, when watching a mother snatch up a fallen little one, has not often traced, both in the rough manner and in the sharply-uttered exclamation—"You stupid little thing!"—an irascibility foretelling endless future squabbles? Is there not in the harsh tones in which a father bids his children be quiet, evidence of a deficient fellow-feeling with them? Are not the constant, and often quite needless, thwartings that the young experience—the injunctions to sit still, which an active child can not obey without suffering great nervous irritation, the commands not to look out

of the window when traveling by railway, which on a child of any intelligence entails serious deprivation—are not these thwartings, we ask, signs of a terrible lack of sympathy? The truth is, that the difficulties of moral education are necessarily of dual origin—necessarily result from the combined faults of parents and children. If hereditary transmission is a law of nature, as every naturalist knows it to be, and as our daily remarks and current proverbs admit it to be; then on the average of cases, the defects of children mirror the defects of their parents;—on the average of cases, we say, because, complicated as the results are by the transmitted traits of remoter ancestors, the correspondence is not special but only general. And if, on the average of cases, this inheritance of defects exists, then the evil passions which parents have to check in their children imply like evil passions in themselves: hidden, it may be, from the public eye; or perhaps obscured by other feelings; but still there.

NATURE'S LAW OF DISCIPLINE.

2. When a child falls, or runs its head against the table, it suffers a pain, the remembrance of which tends to make it more careful for the future; and by an occasional repetition of like experiences, it is eventually disciplined into a proper guidance of its movements. If it lays hold of the fire-bars, thrusts its finger into the candle-flame, or spills boiling water on any part of its skin, the resulting burn or scald is a lesson not easily forgotten. So deep an impression is produced by one or two such events, that afterwards no persuasion will induce it again to disregard the laws of its constitution in these ways.

Now in these and like cases, Nature illustrates to us in the simplest way, the true theory and practice of moral discipline—a theory and practice which, however much they may seem to the superficial like those commonly received, we shall find on examination to differ from them very widely.

Observe, in the first place, that in bodily injuries and their penalties we have misconduct and its consequences reduced to their simplest forms. Though, according to their popular acceptations *right* and *wrong* are words scarcely applicable to actions that have none but direct bodily effects; yet whoever considers the matter will see that such actions must be as much classifiable under these heads as any other actions. From whatever basis they start, all theories of morality agree in considering that conduct whose total results, immediate and remote, are beneficial, is good conduct; while conduct whose total results, immediate and remote, are injurious, is bad conduct. The happiness or misery caused by it are the *ultimate* standards by which all men judge of behavior. We consider drunkenness wrong because of the physical degeneracy and accompanying moral evils entailed on the transgressor and his dependents. Did theft uniformly give pleasure both to taker and loser, we should not find it in our catalogue of sins. Were it conceivable that benevolent actions multiplied human pains, we should condemn them—should not consider them benevolent. It needs but to read the first newspaper leader, or listen to any conversation touching social affairs, to see that acts of parliament, political movements, philanthropic agitations, in common with the doings of individuals, are judged by their anticipated results in multiplying the pleasures or pains of men. And if on looking on all secondary superinduced ideas, we find these to be our ultimate tests of right and wrong, we can not refuse to class purely physical actions as right or wrong according to the beneficial or detrimental results they produce.

Note, in the second place, the character of the punishments by which these physical transgressions are prevented. Punishments, we call them, in the absence of a better word; for they are not punishments in the literal sense. They are not artificial and unnecessary inflictions of pain; but are simply the beneficent checks to actions that are essentially at variance with bodily welfare—checks in the absence of which life would quickly be destroyed by bodily injuries. It is the peculiarity of these penalties, if we must so call them, that they are nothing more than the *unavoidable consequences* of the deeds which they follow: they are nothing more than the *inevitable reactions* entailed by the child's actions.

Let it be further borne in mind that these painful reactions are proportionate to the degree in which the organic laws have been transgressed. A slight accident brings a slight pain, a more serious one, a greater pain. When a child tumbles over the door-step, it is not ordained that it shall suffer in excess of the amount necessary, with the view of making it still more cautious than the necessary suffering will make it. But from its daily experience it is left to learn the greater or less penalties of greater or less errors; and to behave accordingly.

And then mark, lastly, that these natural reactions which follow the child's wrong actions, are constant, direct, unhesitating, and not to be escaped. No threats: but a silent, rigorous performance. If a child runs a pin into its finger, pain follows. If it does it again, there is again the same result: and so on perpetually. In all its dealings with surrounding inorganic nature it finds this unswerving persistence, which listens to no excuse, and from which there is no appeal; and very soon recognizing this stern though beneficent discipline, it becomes extremely careful not to transgress.

Still more significant will these general truths appear, when we remember that they hold throughout adult life as well as throughout infantine life. It is by an experimentally-gained knowledge of the natural consequences, that men and women are checked when they go wrong. After home education has ceased, and when there are no longer parents and teachers to forbid this or that kind of conduct, there comes into play a discipline like that by which the young child is taught its first lessons in self-guidance. If the youth entering upon the business of life idles away his time and fulfills slowly or unskillfully the duties intrusted to him, there by-and-by follows the natural penalty: he is discharged, and left to suffer for awhile the evils of relative poverty. On the unpunctual man, failing alike his appointments of business and pleasure, there continually fall the consequent inconveniences, losses, and deprivations. The avaricious tradesman who charges too high a rate of profit, loses his customers, and so is checked in his greediness. Diminishing practice teaches the inattentive doctor to bestow more trouble on his patients. The too credulous creditor and the over-sanguine speculator alike learn by the difficulties which rashness entails on them, the necessity of being more cautious in their engagements. And so throughout the life of every citizen. In the quotation so often made *apropos* of these cases—"The burnt child dreads the fire"—we see not only that the analogy between this social discipline and Nature's early discipline of infants is universally recognized; but we also see an implied conviction that this discipline is of the most efficient kind. Nay more, this conviction is not only implied, but distinctly stated. Every one has heard others confess that only by "dearly bought experience" had they been induced to give up some bad or

foolish course of conduct formerly pursued. Every one has heard, in the criticisms passed on the doings of this spendthrift or the other speculator, the remark that advice was useless, and that nothing but "bitter experience" would produce any effect: nothing, that is, but suffering the unavoidable consequences.

Must we not infer that the system so beneficent in its effects, alike during infancy and maturity, will be equally beneficent throughout youth? Can any one believe that the method which answers so well in the first and the last divisions of life will not answer in the intermediate division? Is it not manifest that as "ministers and interpreters of Nature" it is the function of parents to see that their children habitually experience the true consequences of their conduct—the natural reactions: neither warding them off, nor intensifying them, nor putting artificial consequences in place of them? No unprejudiced reader will hesitate in his assent.

Probably, however, not a few will contend that already most parents do this—that the punishments they inflict are, in the majority of cases, the true consequences of ill-conduct—that parental anger, venting itself in harsh words and deeds, is the result of a child's transgression—and that, in the suffering, physical or moral, which the child is subject to, it experiences the natural reaction of its misbehavior. Along with much error this assertion, doubtless, contains some truth. It is unquestionable that the displeasure of fathers and mothers is a true consequence of juvenile delinquency; and that the manifestation of it is a normal check upon such delinquency. It is unquestionable that the scoldings, and threats, and blows, which a passionate parent visits on offending little ones, are effects actually produced in such a parent by their offenses; and so are, in some sort, to be considered as among the natural reactions of their wrong actions. And we are by no means prepared to say that these modes of treatment are not relatively right—right, that is, in relation to the uncontrollable children of ill-controlled adults; and right in relation to a state of society in which such ill-controlled adults make up the mass of the people. As already suggested, educational systems, like political and other institutions, are generally as good as the state of human nature permits. The barbarous children of barbarous parents are probably only to be restrained by the barbarous methods which such parents spontaneously employ; while submission to these barbarous methods is perhaps the best preparation such children can have for the barbarous society in which they are presently to play a part. Conversely, the civilized members of a civilized society will spontaneously manifest their displeasure in less violent ways—will spontaneously use milder measures: measures strong enough for their better-natured children. Thus it is doubtless true that, in so far as the expression of parental feeling is concerned, the principle of the natural reaction is always more or less followed. The system of domestic government ever gravitates towards its right form.

But now observe two important facts. In the first place, observe that, in states of rapid transition like ours, which witness a long-drawn battle between old and new theories and old and new practices, the educational methods in use are apt to be considerably out of harmony with the times. In deference to dogmas fit only for the ages that uttered them, many parents inflict punishments that do violence to their own feelings, and so visit on their children *un*natural reactions; while other parents, enthusiastic in their hopes of immediate perfection, rush to the opposite extreme. And then observe, in the second

place, that the discipline on which we are insisting is not so much the experience of parental approbation or disapprobation, which, in most cases, is only a secondary consequence of a child's conduct; but it is the experience of those results which would naturally flow from the conduct in the absence of parental opinion or interference. The truly instructive and salutary consequences are not those inflicted by parents when they take upon themselves to be Nature's proxies; but they are those inflicted by Nature herself. We will endeavor to make this distinction clear by a few illustrations, which, while they show what we mean by natural reactions as contrasted with artificial ones, will afford some directly practical suggestions.

EXAMPLES OF THE RULE OF NATURAL REACTION.

3. In every family where there are young children there almost daily occur cases of what mothers and servants call "making a litter." A child has had out its box of toys, and leaves them scattered about the floor. Or a handful of flowers, brought in from a morning walk, is presently seen dispersed over tables and chairs. Or a little girl, making doll's-clothes, disfigures the room with shreds. In most cases the trouble of rectifying this disorder falls anywhere but in the right place: if in the nursery, the nurse herself, with many grumblings about "tiresome little things," &c., undertakes the task; if below stairs, the task usually devolves either on one of the elder children or on the housemaid; the transgressor being visited with nothing more than a scolding. In this very simple case, however, there are many parents wise enough to follow out, more or less consistently, the normal course—that of making the child itself collect the toys or shreds. The labor of putting things in order is the true consequence of having put them in disorder. Every trader in his office, every wife in her household, has daily experience of this fact. And if education be a preparation for the business of life, then every child should also, from the beginning, have daily experience of this fact. If the natural penalty be met by any refractory behavior (which it may perhaps be where the general system of moral discipline previously pursued has been bad,) then the proper course is to let the child feel the ulterior reaction consequent on its disobedience. Having refused or neglected to pick up and put away the things it has scattered about, and having thereby entailed the trouble of doing this on some one else, the child should, on subsequent occasions, be denied the means of giving this trouble. When next it petitions for its toy-box, the reply of its mamma should be—"The last time you had your toys you left them lying on the floor, and Jane had to pick them up. Jane is too busy to pick up every day the things you leave about; and I can not do it myself. So that, as you will not put away your toys when you have done with them, I can not let you have them." This is obviously a natural consequence, neither increased nor lessened; and must be so recognized by a child. The penalty comes, too, at the moment when it is most keenly felt. A new-born desire is balked at the moment of anticipated gratification; and the strong impression so produced can scarcely fail to have an effect on the future conduct: an effect which, by consistent repetition, will do whatever can be done in curing the fault. Add to which, that, by this method, a child is early taught the lesson which can not be learnt too soon, that in this world of ours pleasures are rightly to be obtained only by labor.

Not long since we had frequently to listen to the reprimands visited on a

little girl who was scarcely ever ready in time for the daily walk. Of eager disposition, and apt to become thoroughly absorbed in the occupation of the moment, Constance never thought of putting on her things until the rest were ready. The governess and the other children had almost invariably to wait; and from the mamma there almost invariably came the same scolding. Utterly as this system failed it never occurred to the mamma to let Constance experience the natural penalty. Nor, indeed, would she try it when it was suggested to her. In the world the penalty of being behind time is the loss of some advantage that would else have been gained: the train is gone; or the steamboat is just leaving its moorings; or the best things in the market are sold; or all the good seats in the concert-room are filled. And every one, in cases perpetually occurring, may see that it is the prospective deprivations entailed by being too late which prevent people from being too late. Is not the inference obvious? Should not these prospective deprivations control the child's conduct also? If Constance is not ready at the appointed time, the natural result is that of being left behind, and losing her walk. And no one can, we think, doubt that after having once or twice remained at home while the rest were enjoying themselves in the fields, and after having felt that this loss of a much-prized gratification was solely due to want of promptitude, some amendment would take place. At any rate, the measure would be more effective than that perpetual scolding which ends only in producing callousness.

Again, when children, with more than usual carelessness, break or lose the things given to them, the natural penalty—the penalty which makes grown-up persons more careful—is the consequent inconvenience. The want of the lost or damaged article, and the cost of supplying its place, are the experiences by which men and women are disciplined in these matters; and the experience of children should be as much as possible assimilated to theirs. We do not refer to that early period at which toys are pulled to pieces in the process of learning their physical properties, and at which the results of carelessness can not be understood; but to a later period, when the meaning and advantages of property are perceived. When a boy, old enough to possess a penknife, uses it so roughly as to snap the blade, or leaves it in the grass by some hedge-side, where he was cutting a stick, a thoughtless parent, or some indulgent relative, will commonly forthwith buy him another; not seeing that, by doing this, a valuable lesson is lost. In such a case, a father may properly explain that penknives cost money, and that to get money requires labor; that he can not afford to purchase new penknives for one who loses or breaks them; and that until he sees evidence of greater carefulness he must decline to make good the loss. A parallel discipline may be used as a means of checking extravagance.

CONSEQUENCES OF OBSERVING NATURE'S RULES OF REACTIONS.

4. In the first place, right conceptions of cause and effect are early formed; and by frequent and consistent experience are eventually rendered definite and complete. Proper conduct in life is much better guaranteed when the good and evil consequences of actions are rationally understood, than when they are merely believed on authority. A child who finds that disorderliness entails the subsequent trouble of putting things in order, or who misses a gratification from dilatoriness, or whose want of care is followed by the loss or breakage of some much-prized possession, not only experiences a keenly-felt consequence, but gains a knowledge of causation: both the one and the other being just like

those which adult life will bring. Whereas a child who in such cases receives some reprimand or some factitious penalty, not only experiences a consequence for which it often cares very little, but lacks that instruction respecting the essential natures of good and evil conduct, which it would else have gathered. It is a vice of the common system of artificial rewards and punishments, long since noticed by the clear-sighted, that by substituting for the natural results of misbehavior certain threatened tasks or castigations, it produces a radically wrong standard of moral guidance. Having throughout infancy and boyhood always regarded parental or tutorial displeasure as the result of a forbidden action, the youth has gained an established association of ideas between such action and such displeasure, as cause and effect; and consequently when parents and tutors have abdicated, and their displeasure is not to be feared, the restraint on a forbidden action is in great measure removed: the true restraints, the natural reactions, having yet to be learnt by said experience. As writes one who has had personal knowledge of this short-sighted system:—"Young men let loose from school, particularly those whose parents have neglected to exert their influence, plunge into every description of extravagance; they know no rule of action—they are ignorant of the reasons for moral conduct—they have no foundation to rest upon—and until they have been severely disciplined by the world are extremely dangerous members of society."

Another great advantage of this natural system of discipline is, that it is a system of pure justice; and will be recognized by every child as such. Whoso suffers nothing more than the evil which obviously follows naturally from his own misbehavior, is much less likely to think himself wrongly treated than if he suffers an evil artificially inflicted on him; and this will be true of children as of men. Take the case of a boy who is habitually reckless of his clothes—scrambles through hedges without caution, or is utterly regardless of mud. If he is beaten, or sent to bed, he is apt to regard himself as ill-used; and his mind is more likely to be occupied by thinking over his injuries than repenting of his transgressions. But suppose he is required to rectify as far as he can the harm he has done—to clean off the mud with which he has covered himself, or to mend the tear as well as he can. Will he not feel that the evil is one of his own producing? Will he not while paying this penalty be continuously conscious of the connection between it and its cause? And will he not, spite his irritation, recognize more or less clearly the justice of the arrangement? If several lessons of this kind fail to produce amendment—if suits of clothes are prematurely spoiled—if pursuing this same system of discipline a father declines to spend money for new ones until the ordinary time has elapsed—and if meanwhile, there occur occasions on which, having no decent clothes to go in, the boy is debarred from joining the rest of the family on holiday excursions and *fête* days, it is manifest that while he will keenly feel the punishment, he can scarcely fail to trace the chain of causation, and to perceive that his own carelessness is the origin of it; and seeing this, he will not have that same sense of injustice as when there is no obvious connection between the transgression and its penalty.

Again, the tempers both of parents and children are much less liable to be ruffled under this system than under the ordinary system. Instead of letting children experience the painful results which naturally follow from wrong conduct, the usual course pursued by parents is to inflict themselves certain other painful results. A double mischief arises from this. Making, as they do,

multiplied family laws; and identifying their own supremacy and dignity with the maintenance of these laws; it happens that every transgression comes to be regarded as an offense against themselves, and a cause of anger on their part. Add to which the further irritations which result from taking upon themselves, in the shape of extra labor or cost, those evil consequences which should have been allowed to fall on the wrong-doers. Similarly with the children. Penalties which the necessary reaction of things brings round upon them—penalties which are inflicted by impersonal agency, produce an irritation that is comparatively slight and transient; whereas, penalties which are voluntarily inflicted by a parent, and are afterwards remembered as caused by him or her, produce an irritation both greater and more continued. Just consider how disastrous would be the result if this empirical method were pursued from the beginning. Suppose it were possible for parents to take upon themselves the physical sufferings entailed on their children by ignorance and awkwardness; and that while bearing these evil consequences they visited on their children certain other evil consequences, with the view of teaching them the impropriety of their conduct. Suppose that when a child, who had been forbidden to meddle with the kettle, spilt some boiling water on its foot, the mother vicariously assumed the scald and gave a blow in place of it; and similarly in all other cases. Would not the daily mishaps be sources of far more anger than now? Would there not be chronic ill-temper on both sides? Yet an exactly parallel policy is pursued in after years. A father who punishes his boy for carelessly or willfully breaking a sister's toy, and then himself pays for a new toy, does substantially this same thing—inflicts an artificial penalty on the trangressor, and takes the natural penalty on himself: his own feelings and those of the transgressor being alike needlessly irritated. If he simply required restitution to be made, he would produce far less heartburning. If he told the boy that a new toy must be bought at his, the boy's cost, and that his supply of pocket-money must be withheld to the needful extent, there would be much less cause for ebullition of temper on either side; while in the deprivation afterwards felt, the boy would experience the equitable and salutary consequence. In brief, the system of discipline by natural reactions is less injurious to temper, alike because it is perceived on both sides to be nothing more than pure justice, and because it more or less substitutes the impersonal agency of nature for the personal agency of parents.

Whence also follows the manifest corollary, that under this system the parental and filial relation will be a more friendly, and therefore a more influential one. Whether in parent or child, anger, however caused, and to whomsoever directed, is more or less detrimental. But anger in a parent towards a child, and in a child towards a parent, is especially detrimental; because it weakens that bond of sympathy which is essential to a beneficent control. In virtue of the general law of association of ideas, it inevitably results, both in young and old, that dislike is contracted towards things which in our experience are habitually connected with disagreeable feelings. Or where attachment originally existed, it is weakened, or destroyed, or turned into repugnance, according to the quantity of painful impressions received. Parental wrath, with its accompanying reprimands and castigations, can not fail, if often repeated, to produce filial alienation; while the resentment and sulkiness of children can not fail to weaken the affection felt for them, and may even end in destroying it. Hence the numerous cases in which parents (and especially fathers, who are commonly

deputed to express the anger and inflict the punishment) are regarded with indifference, if not with aversion; and hence the equally numerous cases in which children are looked upon as inflictions. Seeing, then, as all must do, that estrangement of this kind is fatal to a salutary moral culture, it follows that parents can not be too solicitous in avoiding occasions of direct antagonism with their children—occasions of personal resentment. And therefore they can not too anxiously avail themselves of this discipline of natural consequences—this system of letting the penalty be inflicted by the laws of things; which, by saving the parent from the function of a penal agent, prevents these mutual exasperations and estrangements.

ADVANTAGES OF THE METHOD OF NORMAL REACTIONS.

5. Among the advantages of the divinely ordained method of moral culture by the experience of normal reactions are, First, that it gives that rational comprehension of right and wrong conduct which results from actual experience of the good and bad consequences caused by them. Second, that the child, suffering nothing more than the painful effects brought upon it by its own wrong actions, must recognize more or less clearly the justice of the penalties. Third, that recognizing the justice of the penalties, and receiving those penalties through the working of things, rather than at the hands of an individual, its temper will be less disturbed; while the parent occupying the comparatively passive position of taking care that the natural penalties are felt, will preserve a comparative equanimity. And fourth, that mutual exasperation being thus in great measure prevented, a much happier, and a more influential state of feeling, will exist between parent and child.

THE TRUE RELATION OF PARENT AND CHILD.

6. At present, mothers and fathers are mostly considered by their offspring as friend-enemies. Determined as their impressions inevitably are by the treatment they receive; and oscillating as that treatment does between bribery and thwarting, between petting and scolding, between gentleness and castigation; children necessarily acquire conflicting beliefs respecting the parental character. A mother commonly thinks it quite sufficient to tell her little boy that she is his best friend; and assuming that he is in duty bound to believe her, concludes that he will forthwith do so. "It is all for your good;" "I know what is proper for you better than you do yourself;" "You are not old enough to understand it now, but when you grow up you will thank me for doing what I do;"—these, and like assertions, are daily reiterated. Meanwhile the boy is daily suffering positive penalties; and is hourly forbidden to do this, that, and the other, which he was anxious to do. By words he hears that his happiness is the end in view; but from the accompanying deeds he habitually receives more or less pain. Utterly incompetent as he is to understand that future which his mother has in view, or how this treatment conduces to the happiness of that future, he judges by such results as he feels; and finding these results any thing but pleasurable, he becomes skeptical respecting these professions of friendship. And is it not folly to expect any other issue? Must not the child judge by such evidence as he has got? and does not this evidence seem to warrant his conclusion? The mother would reason in just the same way if similarly placed. If, in the circle of her acquaintance, she found some one who was constantly thwarting her wishes, uttering sharp reprimands, and occasionally inflict-

ing actual penalties on her, she would pay but little attention to any professions of anxiety for her welfare which accompained these acts. Why, then, does she suppose that her boy will conclude otherwise?

But now observe how different will be the results if the system we contend for be consistently pursued—if the mother not only avoids becoming the instrument of punishment, but plays the part of a friend, by warning her boy of the punishments which Nature will inflict. Take a case; and that it may illustrate the mode in which this policy is to be early initiated, let it be one of the simplest cases. Suppose that, prompted by the experimental spirit so conspicuous in children, whose proceedings instinctively conform to the inductive method of inquiry—suppose that so prompted the child is amusing himself by lighting pieces of paper in the candle and watching them burn. If his mother is of the ordinary unreflective stamp, she will either, on the plea of keeping the child "out of mischief," or from fear that he will burn himself, command him to desist; and in case of non-compliance will snatch the paper from him. On the other hand, should he be so fortunate as to have a mother of sufficient rationality, who knows that this interest with which the child is watching the paper burn results from a healthy inquisitiveness, without which he would never have emerged out of infantine stupidity, and who is also wise enough to consider the moral results of interference, she will reason thus:—"If I put a stop to this I shall prevent the acquirement of a certain amount of knowledge. It is true that I may save the child from a burn; but what then? He is sure to burn himself sometime; and it is quite essential to his safety in life that he should learn by experience the properties of flame. Moreover, if I forbid him from running this present risk, he is sure hereafter to run the same or a greater risk when no one is present to prevent him; whereas, if he should have any accident now that I am by, I can save him from any great injury; add to which the advantage that he will have in future some dread of fire, and will be less likely to burn himself to death, or set the house in a flame when others are absent. Furthermore, were I to make him desist, I should thwart him in the pursuit of what is in itself a purely harmless, and indeed, instructive gratification; and he would be sure to regard me with more or less ill-feeling. Ignorant as he is of the pain from which I would save him, and feeling only the pain of a balked desire, he could not fail to look upon me as the cause of that pain. To save him from a hurt which he can not conceive, and which has therefore no existence for him, I inflict upon him a hurt which he feels keenly enough; and so become, from his point of view, a minister of evil. My best course then, is simply to warn him of the danger, and to be ready to prevent any serious damage." And following out this conclusion, she says to the child—"I fear you will hurt yourself if you do that." Suppose, now, that the child perseveres, as he will very probably do; and suppose that he ends by burning himself. What are the results? In the first place he has gained an experience which he must gain eventually, and which, for his own safety he can not gain too soon. And in the second place, he has found that his mother's disapproval or warning was meant for his welfare: he has a further positive experience of her benevolence—a further reason for placing confidence in her judgment and her kindness—a further reason for loving her.

Of course, in those occasional hazards where there is a risk of broken limbs or other serious bodily injury, forcible prevention is called for. But leaving out these extreme cases, the system pursued should be not that of guarding a child

against the small dangers into which it daily runs, but that of advising and warning it against them. And by consistently pursuing this course, a much stronger filial affection will be generated than commonly exists. If here, as elsewhere, the discipline of the natural reactions is allowed to come into play—if in all those out-of-door scramblings and in-door experiments, by which children are liable to hurt themselves, they are allowed to persevere, subject only to dissuasion more or less earnest according to the risk, there can not fail to arise an ever-increasing faith in the parental friendship and guidance. Not only, as before shown, does the adoption of this principle enable fathers and mothers to avoid the chief part of that odium which attaches to the infliction of positive punishment; but, as we here see, it enables them further to avoid the odium that attaches to constant thwartings; and even to turn each of those incidents which commonly cause squabbles, into a means of strengthening the mutual good feeling. Instead of being told in words, which deeds seem to contradict, that their parents are their best friends, children will learn this truth by a consistent daily experience; and so learning it, will acquire a degree of trust and attachment which nothing else can give.

HOW TO DEAL WITH GRAVE OFFENSES.

7. The perpetual ill-behavior of many children is itself the consequence of that chronic irritation in which they are kept by bad management. The state of isolation and antagonism produced by frequent punishment, necessarily deadens the sympathies; necessarily, therefore, opens the way to those transgressions which the sympathies should check. That harsh treatment which children of the same family inflict on each other is often, in great measure, a reflex of the harsh treatment they receive from adults—partly suggested by direct example, and partly generated by the ill-temper and the tendency to vicarious retaliation, which follow chastisements and scoldings. It can not be questioned that the greater activity of the affections and happier state of feeling, maintained in children by the discipline we have described, must prevent their sins against each other from being either so great or so frequent. Moreover, the still more reprehensible offenses, as lies and petty thefts, will, by the same causes, be diminished. Domestic estrangement is a fruitful source of such transgressions. It is a law of human nature, visible enough to all who observe, that those who are debarred the higher gratifications fall back upon the lower; those who have no sympathetic pleasures seek selfish ones; and hence, conversely, the maintenance of happier relations between parents and children is calculated to diminish the number of those offenses of which selfishness is the origin.

When, however, such offenses are committed, as they will occasionally be even under the best system, the discipline of consequences may still be resorted to; and if there exist that bond of confidence and affection which we have described, this discipline will be found efficient. For what are the natural consequences, say, of a theft? They are of two kinds—direct and indirect. The direct consequence, as dictated by pure equity, is that of making restitution. An absolutely just ruler (and every parent should aim to be one) will demand that, wherever it is possible, a wrong act shall be undone by a right one; and in the case of theft this implies either the restoration of the thing stolen, or, if it is consumed, then the giving of an equivalent: which, in the case of a child, may be effected out of its pocket-money. The indirect and more serious con-

sequence is the grave displeasure of parents—a consequence which inevitably follows among all peoples sufficiently civilized to regard theft as a crime; and the manifestation of this displeasure is, in this instance, the most severe of the natural reactions produced by the wrong action. "But," it will be said, "the manifestation of parental displeasure, either in words or blows, is the ordinary course in these cases: the method leads here to nothing new." Very true. Already we have admitted that, in some directions, this method is spontaneously pursued. Already we have shown that there is a more or less manifest tendency for educational systems to gravitate towards the true system. And here we may remark, as before, that the intensity of this natural reaction will, in the beneficent order of things, adjust itself to the requirements—that this parental displeasure will vent itself in violent measures during comparatively barbarous times, when the children are also comparatively barbarous; and will express itself less cruelly in those more advanced social states in which, by implication, the children are amenable to milder treatment. But what it chiefly concerns us here to observe is, that the manifestation of strong parental displeasure, produced by one of these graver offenses, will be potent for good just in proportion to the warmth of the attachment existing between parent and child. Just in proportion as the discipline of the natural consequences has been consistently pursued in other cases, will it be efficient in this case.

DO NOT SET UP TOO HIGH A STANDARD OF JUVENILE GOOD CONDUCT.

8. Do not expect from a child any great amount of moral goodness. During early years every civilized man passes through that phase of character exhibited by the barbarous race from which he is descended. As the child's features—flat nose, forward-opening nostrils, large lips, wide-apart eyes, absent frontal sinus, &c.—resemble for a time those of the savage, so, too, do his instincts. Hence the tendencies to cruelty, to thieving, to lying, so general among children—tendencies which, even without the aid of discipline, will become more or less modified just as the features do. The popular idea that children are "innocent," while it may be true in so far as it refers to evil *knowledge*, is totally false in so far as it refers to evil *impulses*, as half an hour's observation in the nursery will prove to any one. Boys when left to themselves, as at a public school, treat each other far more brutally than men do; and were they left to themselves at an earlier age their brutality would be still more conspicuous.

Not only is it unwise to set up a high standard for juvenile good conduct, but it is even unwise to use very urgent incitements to such good conduct. Already most people recognize the detrimental results of intellectual precocity; but there remains to be recognized the truth that there is a *moral precocity* which is also detrimental. Our higher moral faculties, like our higher intellectual ones, are comparatively complex. By consequence they are both comparatively late in their evolution. And with the one as with the other, a very early activity produced by stimulation will be at the expense of the future character. Hence the not uncommon fact that those who during childhood were instanced as models of juvenile goodness, by-and-by undergo some disastrous and seemingly inexplicable change, and end by being not above but below par; while relatively exemplary men are often the issue of a childhood by no means so promising.

Be content, therefore, with moderate measures and moderate results. Constantly bear in mind the fact that a higher morality, like a higher intelligence,

must be reached by a slow growth; and you will then have more patience with those imperfections of nature which your child hourly displays. You will be less prone to that constant scolding, and threatening, and forbidding, by which many parents induce a chronic domestic irritation, in the foolish hope that they will thus make their children what they should be.

INFLUENCE OF THE LAW OF NATURAL REACTION ON PARENTS.

9. By aiming in all cases to administer the natural reactions to your child's actions, you will put an advantageous check upon your own temper. The method of moral education pursued by many, we fear by most, parents, is little else than that of venting their anger in the way that first suggests itself. The slaps, and rough shakings, and sharp words, with which a mother commonly visits her offspring's small offenses (many of them not offenses considered intrinsically,) are very generally but the manifestations of her own ill-controlled feelings—result much more from the promptings of those feelings than from a wish to benefit the offenders. While they are injurious to her own character, these ebullitions tend, by alienating her children and by decreasing their respect for her, to diminish her influence over them. But by pausing in each case of transgression to consider what is the natural consequence, and how that natural consequence may best be brought home to the transgressor, some little time is necessarily obtained for the mastery of yourself; the mere blind anger first aroused in you settles down into a less vehement feeling, and one not so likely to mislead you.

BE SPARING OF COMMANDS.

10. Be sparing of commands. Command only in those cases in which other means are inapplicable, or have failed. "In frequent orders the parents' advantage is more considered than the child's," says Richter. As in primitive societies a breach of law is punished, not so much because it is intrinsically wrong as because it is a disregard of the king's authority—a rebellion against him; so in many families, the penalty visited on a transgressor proceeds less from reprobation of the offense than from anger at the disobedience. Listen to the ordinary speeches—"How *dare* you disobey me?" "I tell you I'll *make* you do it, sir." "I'll soon teach you who is *master*"—and then consider what the words, the tone, and the manner imply. A determination to subjugate is much more conspicuous in them than an anxiety for the child's welfare. For the time being the attitude of mind differs but little from that of the despot bent on punishing a recalcitrant subject. The right-feeling parent, however, like the philanthropic legislator, will not rejoice in coercion, but will rejoice in dispensing with coercion. He will do without law in all cases where other modes of regulating conduct can be successfully employed; and he will regret the having recourse to law when it is necessary. As Richter remarks—"The best rule in politics is said to be '*pas trop gouverner*:' it is also true in education." And in spontaneous conformity with this maxim, parents whose lust of dominion is restrained by a true sense of duty, will aim to make their children control themselves wherever it is possible, and will fall back upon absolutism only as a last resort.

COMMAND WITH DECISION AND CONSISTENCY.

11. Whenever you *do* command, command with decision and consistency. If the case is one which really can not be otherwise dealt with, then issue your fiat, and having issued it, never afterwards swerve from it. Consider well

beforehand what you are going to do; weigh all the consequences; think whether your firmness of purpose will be sufficient; and then, if you finally make the law, enforce it uniformly at whatever cost. Let your penalties be like the penalties inflicted by inanimate nature—inevitable. The hot cinder burns a child the first time he seizes it; it burns him the second time; it burns him the third time; it burns him every time; and he very soon learns not to touch the hot cinder. If you are equally consistent—if the consequences which you tell your child will follow certain acts, follow with like uniformity, he will soon come to respect your laws as he does those of Nature. And this respect once established will prevent endless domestic evils. Of errors in education one of the worst is that of inconsistency. As in a community, crimes multiply when there is no certain administration of justice; so in a family, an immense increase of transgressions results from a hesitating or irregular infliction of penalties. A weak mother, who perpetually threatens and rarely performs—who makes rules in haste and repents of them at leisure—who treats the same offense now with severity and now with leniency, according as the passing humor dictates, is laying up miseries both for herself and her children. She is making herself contemptible in their eyes; she is setting them an example of uncontrolled feelings; she is encouraging them to transgress by the prospect of probable impunity; she is entailing endless squabbles and accompanying damage to her own temper and the tempers of her little ones; she is reducing their minds to a moral chaos, which after-years of bitter experience will with difficulty bring into order. Better even a barbarous form of domestic government carried out consistently, than a humane one inconsistently carried out. Again we say, avoid coercive measures whenever it is possible to do so; but when you find despotism really necessary, be despotic in good earnest.

THE AIM OF DISCIPLINE SHOULD BE SELF-GOVERNMENT.

12. Bear constantly in mind the truth that the aim of your discipline should be to produce a *self-governing* being; not to produce a being to be *governed by others*. Were your children fated to pass their lives as slaves, you could not too much accustom them to slavery during their childhood; but as they are by-and-by to be free men, with no one to control their daily conduct, you can not too much accustom them to self-control while they are still under your eye. This it is which makes the system of discipline by natural consequences, so especially appropriate to the social state which we in England have now reached. Under early, tyrannical forms of society, when one of the chief evils the citizen had to fear was the anger of his superiors, it was well that during childhood parental vengeance should be a predominant means of government. But now that the citizen has little to fear from any one—now that the good or evil which he experiences throughout life is mainly that which in the nature of things results from his own conduct, it is desirable that from his first years he should begin to learn, experimentally, the good or evil consequences which naturally follow this or that conduct. Aim, therefore, to diminish the amount of parental government as fast as you can substitute for it in your child's mind that self-government arising from a foresight of results. In infancy a considerable amount of absolutism is necessary. A three-year old urchin playing with an open razor, can not be allowed to learn by this discipline of consequences; for the consequences may, in such a case, be too serious. But as intelligence increases, the number of instances calling for peremptory interference may be, and should be,

diminished; with the view of gradually ending them as maturity is approached. All periods of transition are dangerous; and the most dangerous is the transition from the restraint of the family circle to the non-restraint of the world. Hence the importance of pursuing the policy we advocate; which, alike by cultivating a child's faculty of self-restraint, by continually increasing the degree in which it is left to its self-constraint, and by so bringing it, step by step, to a state of unaided self-restraint, obliterates the ordinary sudden and hazardous change from externally-governed youth to internally governed maturity.

RIGHT GOVERNMENT COMPLEX AND DIFFICULT.

13. Remember that to educate rightly is not a simple and easy thing, but a complex and extremely difficult thing: the hardest task which devolves upon adult life. The rough and ready style of domestic government is indeed practicable by the meanest and most uncultivated intellects. Slaps and sharp words are penalties that suggest themselves alike to the least reclaimed barbarian and the most stolid peasant. Even brutes can use this method of discipline; as you may see in the growl and half-bite with which a bitch will check a too-exigent puppy. But if you would carry out with success a rational and civilized system, you must be prepared for considerable mental exertion—for some study, some ingenuity, some patience, some self-control. You will have habitually to trace the consequences of conduct—to consider what are the results which in adult life follow certain kind of acts; and then you will have to devise methods by which parallel results shall be entailed on the parallel acts of your children. You will daily be called upon to analyze the motives of juvenile conduct: you must distinguish between acts that are really good and those which, though externally simulating them, proceed from inferior impulses; while you must be ever on your guard against the cruel mistake not unfrequently made, of translating neutral acts into transgressions, or ascribing worse feelings than were entertained. You must more or less modify your method to suit the disposition of each child; and must be prepared to make further modifications as each child's disposition enters on a new phase. Your faith will often be taxed to maintain the requisite perseverance in a course which seems to produce little or no effect. Especially if you are dealing with children who have been wrongly treated, you must be prepared for a lengthened trial of patience before succeeding with better methods; seeing that that which is not easy even where a right state of feeling has been established from the beginning, becomes doubly difficult when a wrong state of feeling has to be set right. Not only will you have constantly to analyze the motives of your children, but you will have to analyze your own motives—to discriminate between those internal suggestions springing from a true parental solicitude, and those which spring from your own selfishness, from your love of ease, from your lust of dominion. And then, more trying still, you will have not only to detect, but to curb these baser impulses. In brief, you will have to carry on your higher education at the same time that you are educating your children. Intellectually you must cultivate to good purpose that most complex of subjects—human nature and its laws, as exhibited in your children, in yourself, and in the world. Morally, you must keep in constant exercise your higher feelings, and restrain your lower. It is a truth yet remaining to be recognized, that the last stage in the mental development of each man and woman is to be reached only through the proper discharge of the parental duties. And when this truth is recognized, it will be

seen how admirable is the ordination in virtue of which human beings are led by their strongest affections to subject themselves to a discipline which they would else elude.

While some will probably regard this conception of education as it should be, with doubt and discouragement, others will, we think, perceive in the exalted ideal which it involves, evidence of its truth. That it can not be realized by the impulsive, the unsympathetic, and the short-sighted, but demands the higher attributes of human nature, they will see to be evidence of its fitness for the more advanced states of humanity. Though it calls for much labor and self-sacrifice, they will see that it promises an abundant return of happiness, immediate and remote. They will see that while in its injurious effects on both parent and child a bad system is twice cursed, a good system is twice blessed—it blesses him that trains and him that's trained.

To be continued.

X. PHYSICAL AND MILITARY EXERCISES IN PUBLIC SCHOOLS.

A NATIONAL NECESSITY.

BY EDWARD L. MOLINEUX.

Major and Inspector in New York Militia.

From a long and unexampled period of political and commercial prosperity we suddenly find ourselves called upon to struggle for national existence, and while a noble response from the people to the necessity of the struggle has strengthened the hand of government with an intelligent army, and developed the resources of the country, yet the occasion has laid bare defects which call for correction.

Without a standing army of any magnitude we have found our militia laws defective, and have been obliged to create ourselves a military people by the sufferings and bitterness of an experience bought on the field of active warfare.

Military necessity has compelled the loss of invaluable time in the organizing and preparing of our troops, which would not have been required had we been able to meet the rebellion at the commencement with well trained officers and an experienced and carefully drilled militia.

"*The first object*," says Daniel Webster, "*of a free people is the preservation of their liberty:*" a noble truth which must speak home to the heart of every American, and if, as it is asserted, "the future life and character of a nation is to be seen in its system of schools," then we may well listen with some degree of alarm to the warnings and unmistakable evidences by which we are surrounded, that the American race is physically deteriorating.*

The question arises, has our National system of Education been such as to qualify and prepare us to maintain successfully, the noble inheritance which was won by the physical energies of the men of the Revolution, and with our success in the field of intellectual culture, have we kept the physical advantages possessed by our forefathers?

Let us not mislead ourselves in this matter, but calmly look at the facts, that as a rule, our present system of Public Education is devoted *solely* to the mental and moral improvement of the scholars, and that the encouragements and rewards held out by committees and teachers, stimulate to the overexertion of the brain, and sacrifice in too many instances, the health and growth of the body.

Although great improvement has been made of late by the shortening of the time devoted to study, and by the introduction of more frequent periods of recreation, yet still little has been attempted for giving exercise and activity to the body; this important training being left to the care of parents or the pupils themselves.

*Miss C. E. Beecher's "Appeal to American Women," "Calisthenics," &c.

Is it not too true that the increase of ill health, broken constitutions, and early deaths, among the growing portion of our population, especially in cities, warns us, year after year, that the thirst for knowledge, and the restless seeking after mental and intellectual improvement, have been bought at the expense of the vital energies of the great body of youth who throng the colleges and public schools of our land? *

If any one denies this, let him visit our institutions of learning, and while he may well admire the wisdom and forethought which has established our prosperity on a noble system of National Education, he can not but notice the debility evinced in the frames of so many youthful votaries of intellectual training; the exceptions making the contrast still more strikingly painful. Then let him go to the counting-house or the close confinement of some mechanical employment, where the evils from mental activity, unaccompanied by physical recreation, are yet more strongly developed. These evils assail not only the happiness of families, but the prosperity of the nation and the well-being of the race. Is this right or necessary? Can it be avoided?

The solution of these momentous questions may well engage the serious attention of the reflecting teacher, parent and patriot; and to them we assert that, *unless physical exercises are enforced upon our system of Public School education, our intellectual culture will be of little avail, and that our nationality stands in danger of sinking a prey to designing opponents.*

That enfeebled races are invariably conquered by those more powerfully developed, is proved by innumerable instances in history. That physical training was an important branch of education among the Greeks and Romans, is well known. The system inculcated by the iron-hearted Lycurgus, among the Spartan youth, was of a nature admirably adapted to fit them for all the sterner realities of life, whilst the athletic games and exercises of the youth of Rome, comprising, as it did, walking, running, wrestling, swimming, and military drill, were the means of improving, to the utmost, their physical powers Upon reaching manhood, the advantage of this training was indicated by the robustness of form, and the constitutional vigor which enabled them to undertake labor, fatigue and hardship of every kind, with perfect indifference.

The Spartan and the Roman soldiers were by this early training, not only qualified to surmount with ease the various obstacles and difficulties incident to a state of active warfare, but they also became gifted with precision and rapidity in every movement, and each man was likewise endowed with that confidence in himself, and that unbounded reliance upon order, subordination and combined action, which nourish audacity, yet temper it with coolness and steadiness.

Unfortunately this system, by which the vigor and valor of a Spartan or a Roman has passed into a proverb, fell into disuse, and as it was neglected for more intellectual pursuits, so the grand empires founded by its vigor crumbled before the assaults of more athletic barbarians.

The influence of health upon the faculties of the mind is acknowledged by all, and yet how few in this country devote attention to those all important exercises which are necessary to the preservation of health, and without which intellectual power can not be applied to its highest use. The talents, the expe-

* [We do not share this alarm, or believe that hard study, apart from open or secret vice, has had much, if any thing, to do with such physical deterioration as does exist.—Ed. *Am. Jour. of Ed.*]

Hence of our best educators of youth, are taxed to devise exercises to develop the *mental* faculties, forgetting that too close application to study is detrimental to the growth of the body.

But few thoughtful teachers will deny the extent to which this evil has reached, or be unwilling that the strain upon the intellectual powers of children, by absorbing studies, should be counteracted by cheerful and relaxing exercises by which the mind will be relieved and at the same time strengthened. The testimony of physicians, the valuable works on health by Dr. Warren, Miss C. E. Beecher, and many other able writers, furnish incontestable evidence of the necessity of systematic exercise for children. To accomplish this it is absolutely necessary to adopt it in our course of education, for in the majority of cases it can not, or will not, be attended to at their homes.

What then is the most simple, feasible and useful plan to adopt for physical exercises in our Colleges, Normal and Public Schools?

We unhesitatingly say, that the only successful, orderly, and systematic method is, *to engraft them upon the course of studies during school hours, and to carry it out under strict military discipline;* the exercises being such as are best suited to the age, strength and capabilities of the pupils, namely: calisthenics and walking for the girls and younger children, and *military exercises* for the elder boys.

Let not the kind hearted parent exclaim against his boy learning the military drill, for fear of his acquiring a taste for warfare; or the lover of peace imagine we would re-establish the stern laws of Lycurgus. We would have moderation in this respect as in mental studies, and while we would not, as some may imagine, displace the bust of Howard in our school rooms for a Napoleon, yet we would impress upon the minds of boys the image and example of Washington, and in cultivating their intellectual faculties, likewise prepare them in mind and body to develop in manhood those virtues and powers which constitute a true and noble citizen;—a sincere love of country, of national probity and justice, beyond selfish considerations or personal aggrandizement. They should be brought up to a sense and knowledge that it will be their honorable duty and privilege to protect their native land, that she fosters and educates them in their youth, and that upon their manhood her nationality depends.

We can never become an aggressive military people; the fields for successful enterprise in art, science, commerce and agriculture, are too broad and inviting to render military pursuits very attractive, and unless we cultivate such exercises and discipline in youth, they will be, as they have been, neglected when engaged in the active pursuits of business. The clear, common sense of the American parent will acknowledge, not only the national necessity, but the moral advantages of this; for what fond mother is there but would prefer to see in her son a manly, patriotic spirit, rather than a timid, mercenary one, which, shunning danger, would sacrifice the honor and greatness of his country to the base love of gain and ease.

We have suggested that the exercises be conducted under strict military discipline, because it is impossible for a large body of children to be exercised in the usual school limits, unless the greatest decorum and order is observed; and if conducted under the supervision of a teacher, dangers and accidents will be avoided, which always occur when children are rash and thoughtless in attempting to accomplish too much. Thus conducted, they will prove an

invaluable aid to the teacher in the enforcement of discipline in the school room, and teach that invaluable lesson which it seems so difficult for children to learn,—unhesitating obedience.

For the advantages of this system let us examine the practical testimony afforded in the European schools, where considerable attention has been paid to this important matter.

On the continent the advantages of physical training are appreciated to their fullest extent, especially in the Industrial Reform schools, where the admirable principle has been adopted of teaching "what they will have occasion to use when they become men,"* and thus render them useful members of society. To Dr. Barnard's National Education in Europe, we are indebted for the following extracts and illustrations of this position.

In the Reform School of Rauhen Haus, near Hamburg, "they are taught to develop their bodily and mental powers in various practical ways; to use the fire engine, to swim, to save persons from drowning, and use remedies to recover them, to climb a mast and handle the sail, of a ship. They act as a jury among themselves. Their chief reward is to be enrolled in the table of honor. In the great fire of Hamburg, their conduct was physically, as well as morally, heroic, and while bravely saving life and property, they steadily refused rewards." Parents who, perhaps justly owing to the numerous accidents in Gymnasiums, are timid of their children becoming injured by these exercises, should carefully read the system pursued in Fellenberg's celebrated establishment at Hofwyl. "A great variety of exercises of the body and the senses are employed, so that every boy shall acquire a knowledge of his physical strength, and attain confidence with regard to those efforts of which he is capable, instead of that foolhardiness which endangers the existence of many who have not learned to estimate their own powers correctly." At Ruysselde, Belgium, the following plan was pursued: In summer, from 5½ to 6½ A. M., Exercises and Manœuvres; from 7½ to 8¾ P. M., Gymnastics. In winter, several hours were devoted to these exercises, and the result found (as in this report,) was, that "rickets, scrofula, want of elasticity in the limbs, difficulty of walking, all rapidly disappeared under the drill, which confirmed the health and increased the strength and activity of the children, and accustomed them to discipline. It predisposed the pupils to sleep, and was an effective safeguard against shameful habits and secret vices. The battalion movements were performed with as much precision as that of the army, a platoon armed with condemned carbines, marched at the head. The bayonet exercises and skirmishing were as good as play to the boys." A remarkable instance of the moral effects of military discipline upon the lads of the *Colonie Agricole*, at Mettray, is related by M. Demetz, and was published in Barnard's Journal, Vol. 1, p. 623. "During the revolution of 1848, a band of workmen came to Mettray, with flags flying and trumpets sounding, and meeting the youths returning, tired from field labor, their pickaxes on their shoulders, thus addressed them:—'My boys, do not be such fools as to work any longer. Bread is plentiful; it is ready for you without labor.' The *chef*, who was conducting the boys, and who behaved with the greatest calmness and tact, immediately cried, 'Halt! form in line.' The lads, being accustomed to march like soldiers, immediately formed. The *chef* then

*Aristippus.

said to the men, 'My friends, you have learned to labor; you have a right to rest; but leave these lads; let them learn now, and when their turn comes they may rest as you do.' The men gave way, the youths marched home, and Meltray was saved,—saved, as I believe, by our habit of military discipline." It was the heroic exertions of these young *colons* during the inundation of 1856, which won for them the praises of all France. These instances might be multiplied, but are sufficient to show the moral and physical benefits of military exercises and discipline upon boys, even of the lowest class.

The governments of Europe being upheld by the bayonets of large standing armies, and requiring, as they do, in many of the kingdoms, the compulsory service of all young men, renders it unnecessary for the daily public schools to teach military exercises to that extent, which it is well for our Republican government to do. Yet in Europe they watch with the greatest assiduity and care the bodily powers of the children, knowing its great advantage not only in health, but the maintenance of order.

In Great Britain much interest has of late been evinced on this subject, and Mr. Edwin Chadwick becoming convinced that the studies and confinement in their schools were generally prolonged beyond the powers of the children, and in violation of the laws of health, devoted himself to collecting testimony respecting the advantages of the military drill upon the health of children. His investigations have elicited much valuable information, the more interesting to us as they mark its advantages to a nation which, like our own, depends for its defence mainly upon a volunteer force.

The following synopsis of his pamphlet we extract from the N. Y. Evening Post, November 1st:

Mr. Chadwick considers "In a sanitary point of view that a systematized drill is good, and for defective constitutions requisite for the correction of congenital bodily defects and taints, with which the youth of a very large proportion of the population, especially among the poorer town populations, are affected: and that for these purposes the climbing of masts, and other operations of the naval drill, and swimming, are valuable additions to the gymnastic exercises of the military drill, and when properly taught are greatly liked by boys. From a moral point of view, also, this drill will give the pupil an early initiation into all the acquirements of discipline—namely, duty, order, obedience to command, self-restraint, punctuality and patience."

The evidence furnished by English drill officers shows its national value, and "That at school it may be taught most economically, as not interfering with productive labor, and that thirty or forty boys may be taught the naval and military drill at one penny farthing (two and a half cents) per week per head as cheaply as one man, and the whole juvenile population may be drilled completely in the juvenile stage, as economically as the small part of it now taught imperfectly on recruiting or in the adult stage; and that, for teaching the drill, the services of retired drill sergeants, and naval as well as military officers and pensioners, may be had economically in every part of the country.

That the middle and higher class schools should have, in addition to the foot drill, the cavalry drill, which the parents of that class of pupils may afford.

That the drill, when made generally prevalent, (without superseding,) will eventually accomplish, in a wider and better manner, the objects of volunteer corps and of yeomanry, which, as interrupting productive occupations now

becoming more absorbing, is highly expensive, rendering all volunteer forces dependent in fitful zeal, and eventually comparatively inefficient; that the juvenile drill, if made general, will accomplish better the objects even of the militia; that the juvenile drill will abate diffidence in military efficiency, and will spread a wide predisposition to a better order of recruitment for the public service, will tend to the improvement of the ranks of the regular forces, whether naval or military, and will produce an immensely stronger and cheaper defensive force than by the means at present in use or in public view.

And, finally, that the means of producing this defensive force, instead of being an expense, will be a gain to the productive powers and value of the labors of the country."

Lieutenant-General Shaw Kennedy, in a letter expressing his high approval of the plan, states, "that the inferences drawn can not be controverted. He is of opinion that if the measure is carried out it will be the means of bringing two million of men actually under arms in Great Britain alone, that is, excluding Ireland. He conceives that the effects of military drill and exercises, and the use of fire-arms taught at schools, would never be forgotten; that a youth so trained would, at any future period, with a slight degree of practice, renew his knowledge of what he had been taught."

Nor has the training of a better class of seamen been neglected. This is of vital importance to the well-being of a commercial people, and it is well for us to see what steps England is taking in the matter.

"For the purpose of giving instruction in the naval drill, old masts and tackle have been obtained for some of the training schools in England, and Mr. Taffnell has received expressions of satisfaction from naval men of the way in which some of the boys have by these means been tutored as seamen in pauper schools. In order to form sailors, it is necessary to have masts and sails rigged in the playgronnd, and a regular seaman must be engaged to drill the boys.

Mr. Baker has observed that the naval drill as given at Greenwich, is highly effective. "He states that he was on board the Ganges and the Conway at a time when many boys came on board who had been taught the naval drill at Greenwich naval schools; and that they proved to be as ready and well trained as man-of-war's men; they were clean and orderly, and as a class were first-rate seamen, becoming petty and warrant officers in greater proportion than others."

Of its consequence upon the national health and industry, "Professor Owen has stated that even in the best-warmed and ventilated schools, five or six hours' enforced stillness of growing children is a violation of the primary laws of physiology; whilst Miss Nightingale and others agree that, under the present system, children are placed under conditions which impair good bodily health and generate epidemic disease. Mr. Rahnson, a school commissioner at Amsterdam, states that the physical evils attendant upon the present amount of sedentary confinement in schools, required from young children, is beginning to attract attention in Holland, and that they have under trial a system of exercises for schools advocated by Dr. Schrieber, of Leipsic. 'The chief question,' says the latter gentleman, 'is, How are our children to be brought up? Is it according to the laws of nature? The answer is, No; or we should not see so many children who were rosy and healthy before going to school, become pale and bloodless after school has begun;' and he prescribes the limitation of the hours of school confinement.

Mr. Robert Rawlinson, civil engineer, gives the following as his opinion of the advantages of school drill in connexion with manual labor:

"In my opinion, based on experience and observation, I think school drilling and training would prove of the utmost consequence to the boys in after life. I may give a few instances. In all engineering and building, tradesmen are frequently required to use their strength in concert, lifting, carrying and drawing; men, to use their joint strength not only effectively but safely, must have confidence in each other. Two trained men will lift and carry more easily and safely than four untrained men. I have frequently seen trained men weed out unskilled men where heavy lifting has been required, because they dare not risk the danger arising from unskilled strength, and few have performed with more safety work which would have been lighter and easier if all had been equally skilled. Men frequently reject the assistance of unskilled men, as there is absolutely danger in having them near. Frequent accidents arise from using men unskilled in lifting, in hoisting, and at capstan work. * * * Boys should not only learn to march, but to lift, carry and pull in concert. There are many necessary feats of strength in all trades, which are more matters of knack and tact than of brute strength. Brute strength frequently fails to do that which comparative weakness can accomplish easily with skill and confident concert. There is no regular system of training in concert to use human strength in the best manner in any trade, so far as I know; acting in concert is a matter of necessity, and practice gives facility and confidence. Drill and training would probably double the effective human power of any establishment, especially if numbers are instructed in joint feats of strength. That which is taught to youth is never forgotten in after life."

"As regards its fitness as an appendage to the highest branches of education, we have the testimony of experienced examiners at the University of Oxford, England, who state that six hours mental work, instead of ten or twelve, for adults, was the time of the great majority of the prizemen; and it was always found that those who were the foremost in mental labor were commonly the foremost in boat-rowing and physical exercise. The Vice-Chancellor of Oxford testifies that the institution of the systematized exercise of the volunteer drill in that college had been attended by an improvement of the mental labors, and of the whole of the order and discipline, as well as of the health of the University; and that, encouraged by these results, he was considering of making provision for cavalry exercises."

Mr. Chadwick has also furnished incontestable proofs of the absolute necessity of more active physical training for females and of its bearing upon the future welfare of the race. But this subject has been rendered so familiar to American readers by the able pen of Miss Catherine E. Beecher, that we need not touch upon the European view, except to say that the noble labors of Professors Ling and Branting, of Sweden, have been ably seconded by very many of the governments of Northern Europe, where a method of gymnastics for females, has been systematized and practically adopted. From this brief sketch of the practical working of physical military exercises in Europe, let us turn to what has been accomplished among our own countrymen, whose activity in behalf of public education called forth the compliment from Prof. LeRoy, which we wish was better deserved, especially by the class which he specifies.

that "the improvement of schools is, so to speak, the fixed idea, the constant preoccupation of the statesmen of America."

We have indeed a noble and liberal system of education, but we would see its fostering care so extended as to invigorate the bodies as well as develop the mental faculties and intellectual powers of the pupils. The military exercises would best accomplish this, and at the same time form our public schools into

A NURSERY FOR A BRAVE AND EFFECTIVE MILITIA.

Early in October last a communication was addressed by the writer to the different governors, and various other persons connected with the executive departments of the Northern States, in regard to the advantages to be derived from the introduction of infantry drills in the public schools, and by early preparation in school-days to strengthen the *militia* of the different States. At the same time it was placed before the New York and other City Boards of Education, and referred by them to special committees. The subject was also agitated through the columns of the daily press. The warm responses which have been accorded to these communications, prove the deep interest which is felt in this important matter, and it is to be hoped by the time this article appears in print,* some legislative action will have been taken.

In New York, the energetic Judge Advocate General, William H. Anthon, being engaged in a report upon the militia laws, and taking a warm interest in all matters relative to the efficacy of the militia, thus speaks of the importance of some alteration in the present system, in a letter addressed to Mr. Curtis, President of the Board of Education in the city of New York:

"The entire system, in my judgment, needs revision and reform, in order to make the militia what the Father of the Republic intended it should be.

It has been suggested by several persons, and among others Col. Richard Delafield, U. S. A., and Maj. E. L. Molineux, that an excellent foundation for an improved militia system would be the introduction of 'The Manual of Arms,' and 'The School of the Soldier and of the Company,' into our public schools.

I am disposed to consider these suggestions as valuable, and shall feel obliged to you if you will, as early as may be convenient, inform me how far you deem them practicable, and how they may be most conveniently introduced into the institutions under the charge of your Board."

Mr. Curtis, whose personal observations on the European school systems, and whose long experience at the head of the Educational Board of the largest city in the Union, renders his views of the greatest value, replied:

"It has been my opinion for years that military instruction should, under certain restrictions, and to a certain extent, be given to the older boys in all the schools and institutions that are supported or draw funds from the public treasury. It is but just to the State whose munificence sustains these schools, that the pupils should be instructed in those branches of knowledge that will make them useful and effective in defending and protecting the State. A well organized militia, receiving from year to year into its ranks the disciplined and instructed youth who have passed through the public schools, and to whom the duties of the soldier are familiar, will always be sustained by the public confidence and esteem."

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* Written December, 1861. Recommended by Governors Andrew and Morgan in their messages in January

Military discipline and exercises are by no means an untried experiment in the annals of American education; some of our best private schools and institutes having long since adopted it, and with a good degree of success as it will be our endeavor now to show.

To the admirable regulations of our National Military and Naval Academies, we need not refer; the systematic course pursued by them for the development of health, for discipline of mind and body, being well known to the majority of our readers.

One instance which came under the writer's personal observation, will sufficiently illustrate the dependence which can be placed upon well-drilled boys in case of emergency.

In April last, when Washington was defenceless, Baltimore in riot, and all Maryland in a state of revolt, communication being cut off at Annapolis, there was great fear of attack upon that important strategetic point. The pupils were prepared for any exigency, and slept with their loaded rifles over their cots. At an alarm of a night attack, there was no hesitation among those gallant little fellows. They were up directly; fell in their ranks and off at a *double-quick* for the point of danger, in an almost incredible short space of time. The elder boys dragged their howitzer with them. Had an attack taken place, those pupils would have given a good account of themselves and have stood their ground with courage and steadiness. The secret of this is the *discipline*, for which they are indebted to the assiduity of their brave and experienced superintendent, Captain Blake of the Navy.

Let us read the opinion of this able officer in respect to the applying of this *discipline* to public schools:

"My experience at this institution long since impressed me with the importance of this subject, and I intended to have given my views publicly, but you have left nothing more to be said upon it, and I can only hope that those who have the control of our public schools will view the subject as we do. We have received about a hundred and forty acting midshipmen this year, some of them very young, and although they have not been here two months, they present a beautiful example of such results as the system would produce all over the country."

It must be acknowledged that the States now in rebellion have devoted much more attention to military instruction in special schools, than we have, many of them pursuing the European plan of State Academies devoted to military science. Thus while we have been obliged to *create* officers from the small nucleus afforded us from West Point, they have had the students from State Colleges to officer their regiments.

For a long time back Virginia has annually expended upon her Military Institute nearly $50,000; South Carolina, $30,000; Kentucky and other States have likewise institutions, founded in whole or part, upon a military basis.

Although several attempts have been made to obtain legislative action for similar institutes in the Northern States, they have not, up to the present time, been successful, owing, we think, to the groundless opinion that it would prove a heavy tax, without a corresponding advantage. We shall endeavor to prove in this article how economically an academy could be supported. It is, therefore, to private enterprise, we are indebted for any experiments which have been made in this respect.

Several of our best boys' boarding-schools in this portion of the country, have for a long time employed a military instructor for the pupils and been managed on a semi-military organization; they have been well sustained by the patronage of the public. We instance two or three schools of the present time.

Dr. Russell's Collegiate and Commercial Institute of New Haven, is one which has already been of national advantage to us, for according to Prof. Daniel C. Gilman, "the scholars were of great service in drilling the recruits of Connecticut at the outset of the war, and many of them now hold important posts in the army. The scholars formerly trained as infantry and are now at artillery practices." Mr. Gilman very justly observes, that in a country like ours with no standing army, every able-bodied man should learn to bear arms, and there can be no cheaper or efficient way of doing this than by teaching boys in schools.

The Eagleswood Collegiate and Military School, near Perth Amboy, N. J., has been recently organized on the military plan. The scholars are formed into a battalion under a superintendent and colonel commanding, the rest of the officers being taken from the scholars. The State of New Jersey has supplied the institute with arms, and the military regulations apply to the conduct of the pupils in their general deportment. The reasons given for employing this discipline are the same that apply in every instance, that it is the most orderly and effective, increases the energy, vigor and manly attitude of the boys, and induces cheerful obedience.

To Major J. P. Prall, Military Instructor, we are under obligations for the following account of Mr. Tracy's *Military Boarding School, at Tarrytown, N. Y.*:

"There is no question, in my mind, of the utility of military instruction in schools, and if I had any doubts, they would speedily be removed by the fact that the very exigency you propose to provide for is being developed, only in a less degree, in the volunteer army now fighting our country's battles. There are a number holding honorable positions in the army of the Potomac, and elsewhere, who have more particularly come under my own observation, that have passed through a course of similar instruction to what you propose, in private military boarding schools, who give evidence of superior knowledge as soldiers, and with a little preparation were *ready* to assume the duties and responsibilities of the field and camp. They have more particularly distinguished themselves as drill masters and thorough disciplinarians, the very ground you proposed to cover in your articles in the N. Y. Tribune of Nov. 20. I have especially noticed, of late, the facility with which youth acquire military knowledge since the outbreak of the rebellion, when the occasion seems to impress them more strongly with its importance.

Independent of the military availability of youth thus instructed, the promptness and precision that the system induces is apparent. A simple sketch of the routine of duties in a school over the military department of which I have the supervision, may give an idea of its utility, as well as its usefulness. This department is conducted in such a way as to make the military feature an auxiliary to the classical and preparatory. Part of two days in each week is more especially devoted to military drill and instruction, when the flag is raised on the flag-staff on the parade ground with the roll of the drum, and the sunrise gun is fired. At sunset it is lowered with the same ceremony by a file of boys, in charge of an officer, or non-commissioned officer. On other days of the week

a drill of about an hour is held, in command of the company officers,—always in presence of the Principal. The utmost strictness is required in all the military features. The "Assembly," when beaten for drill or parade, occupies one minute—*immediately* after, "*fall in*" is given by the orderly, when *entire* silence is required. Boys being naturally playful, much more care in these particulars is necessary than in grown persons. *Tattoo* begins at 9 o'clock precisely, when the minute of its duration expires every cadet is required to be in line for "roll call," and the three squads, each in charge of an officer, are marched by flank to their quarters, (the whole not occupying more than two minutes.) They halt opposite their beds, and salute their officer as he passes out;—in five minutes the lights are extinguished. Their clothing is uniformly arranged, and in such way that if called up at night they can dress without lights and without loss of time. The officer in command of each, being held responsible for the condition of his squad. The military instructor inspects at unexpected times, and directs the chiefs of squads to report the result to the officer of the day, through whom all reports to the Principal must be made at 9 o'clock A. M. each day. *Reveille* at day break, and they march by squads to wash room, where twenty minutes is allowed for necessary ablutions, blacking boots, &c., and then the march to the Assembly-room for "*roll call.*" Inspection of boots twice a week, at unknown times.

The squads for the *mess-room* march in order, filing each side of the tables, face inward, and "*sit down*" by command; *rise*, march out and *break ranks*, observing the same military precision. These various duties are performed with pleasure and pride by the cadets, and the same promptness and regularity is apparent in every movement.

The *armory* and arms are in charge of a detail of four, and are inspected in turn on the roll, each week, and reports are made of disabled pieces, and the general condition of the arms and armory, to the officer of the day, and through him to the Principal. The various reports are embodied into one, by this officer, so that the Principal is not burdened with the details unless he calls for them.

Orders are issued from time to time, by the Military Instructor, and engrossed in a book, which is open for inspection of visitors, announcing promotions, results of inspection, and noting cases of military merit and demerit, &c. This has a tendency to stimulate to exertion, and to efforts to avoid unfavorable notice.

Military classes 1st, 2d and 3d, graduated according to military merit are established, and promotions to them made after strict examinations. All company officers are selected from the 1st class.

A class of Honor, consisting of members of the First class who have escaped being reported for disobedience and improper conduct, is also formed. A given number of military demerits reduces a cadet, and the badge which is worn on the left breast is taken from him. He may, however, be reinstated.

Military demerits are punished by military penalties.

Cadets are taught to observe the position of the soldier when off duty also; the benefit of this is very marked. When the machinery is properly set in motion, the labor generally attending the minutiæ of school duties is greatly reduced, and much more pleasantly and thoroughly performed.

I have not entered into all the details, (and have given the military only) but enough to give a general idea of the plan adopted by this school. There are

different modes in use in other schools. Some partaking more of the military, and some less. I think there is danger, often, of *too much* military being engrafted so as to make it burdensome; great care should be taken in this particular, as the cadet wearies of it when the novelty is past."

Mr. N. W. Taylor Root, in his admirable book on School Amusements, furnishes practical testimony "that it fosters habits of promptness, exactness, and unanimity of action; teaches implicit obedience to commands, erectness of carriage, a neat and clean appearance, and a gentlemanly and respectful behavior."

It will thus be seen that a system of military drill has been tested morally and physically, in private schools, and found of decided advantage.

Why should these benefits be denied to the pupils of Public Day Schools?

Why should this vast defensive power be lost to the Government?

As a national military necessity; as a protection to the health and constitutional vigor of American youth; and as a powerful agent upon their moral behavior, their energy, self-reliance and spirit of enterprise, let PHYSICAL TRAINING BE ENGRAFTED ON THE COURSE OF STUDIES FOR ALL THE PUPILS EDUCATED AT THE EXPENSE OF THE STATE. Let us not hesitate at the magnitude of the undertaking, for it is a *necessity*, and under proper regulations and restrictions can be successfully and economically accomplished.

The greatest difficulty to be surmounted is the successful working of a system at once applicable to the requirements of a small district school, with a limited number of scholars, attending only at certain seasons of the year, and of those of the larger cities, with numerous schools, in which a great number are under instruction.

Let us commence at the foundation, in the Primary Schools.

The moment the child enters the school care should be taken that the mental exercises which are given should be relieved by frequent intermissions for running and playing, under the supervision of the teacher. This we are glad to say is the case in very many of our best primary schools; but it is when the child becomes more advanced, when there are lessons to commit to memory at home, that some simple physical *exercises* should be taught him every day; exercises calculated to develop the growth and expand the muscles. The calisthenics recommended in Miss Beecher's work are excellent, simple, and easily fitted to the limits of the school house. The report of Mr. W. H. Wells, Superintendent of Public Schools for Chicago, for 1860, gives some interesting particulars of simple exercises which have been attempted in that city.

There would be but little difficulty experienced in selecting movements and gymnastics suitable for the strength and ability of the classes of younger boys and girls under instruction, provided the method was established as an imperative duty which *must* be regularly put in practice, and that no lack of interest on the part of teachers, or laziness of the pupils would be accepted as an excuse for non-compliance with the regulation. We trust if Physical Training is carried out in our system of education, that a carefully prepared Manual of all kinds of exercises, embracing the military drill, will be compiled for the use of schools; in a word, a text-book to which our teachers can turn with confidence to find exercises suitable for all classes of pupils.

From the Girls and Primary, we pass to the Boys Grammar departments, for

* Such a Manual will soon be published by J. B. Lippincott & Co., Philadelphia.

which we propose military exercises, as being the most economical and advantageous for public schools; for *tactics* manœuvre large bodies in a small space, in an orderly manner, whereas gymnasiums are too expensive, and can not be made large enough to accommodate many scholars at once. This opens to us our most difficult, but at the same time most useful, field for prompt and energetic action.

Suppose we take for an example one of our large cities. The lower and female departments having simple physical exercises in use, it is wished to introduce military exercises into the grammar schools. Let us see how simply it can be organized, and how far it is possible to extend these studies if desired.

The following interesting letter from the Mayor of Bangor, will show the movement in that city, an example well worthy of being imitated.

CITY OF BANGOR,
Mayor's Office, Dec. 21st, 1861.

DEAR SIR:—In reply to yours of the 19th inst., I would say that, upon my recommendation, through a communication I made to our City Council, on the first Monday of the present month, an Order was passed directing the military drill to be introduced into a portion of the Public Schools of this city.

I had given the subject some thought and investigation, and was prepared to recommend the adoption of the drill for the physical training, no less than for the military instruction it might impart. The prevalent idea that education consists in training the intellect only, is gradually becoming superseded by the more rational theory that true education consists in training the moral and physical, no less than the intellectual faculties.

For the physical training of boys, I think the military drill has much to recommend it besides the military instruction it imparts. It will tend to give them a better command of their muscles, and impart a manly gait and bearing. It will also, if properly conducted, teach them self-control, and give them true ideas of order, discipline, and subordination, and whilst it will relieve them from the monotony of their ordinary studies will, by a grateful change, enable them to return to them with renewed interest.

We are entering upon the new experiment with caution, and have commenced by devoting an hour, twice a week, to the drill. We began in the school rooms, but found, after a few lessons, that the space these afforded was too small, and for the present shall use the large Gymnasium Hall. In summer, the grounds in connection with our school houses may be found well adapted for the purpose.

The boys, with scarcely an exception, manifest much interest in their drills, and receive the instruction much more readily than men. Two or three of our public spirited citizens, well qualified for instructors, have generously consented to devote the necessary time for drilling the boys, for the present winter, without compensation.

Some of our teachers are also disposed to qualify themselves for drill masters, and we are thus enabled to try the experiment without much expense.

I have had no communication with Gov. Washburn in relation to this subject, and was quite unaware of your interest in the matter. I however noticed the article in regard to it in the Evening Post of Nov. 8th, and was gratified with the important facts which it contained. I shall be glad to receive any further

communication you may make to the public on this important subject, and should you wish, will be pleased to communicate to you the further progress of our experiments.

Yours respectfully,

ISAIAH STETSON, Mayor.

EDWARD L. MOLINEUX, Esq., New York.

To establish thoroughly and economically this military culture, the Board of Education should appoint some competent person as Chief of the Staff to organize and carry out a system of instruction and drill; he to have under him two or three assistant instructors of experience, under whose guidance *a teacher, or teachers from each school*, should be fully instructed in the tactics, so as to be able to superintend the drill of the boys, which should always take place during school hours, and thereby form a recreation from mental study, and not encroach upon their play time. These are the only persons connected with the department beyond the scholars themselves, as it should be managed on the principle of obtaining *the whole working force* of the military organization from among the pupils.

The grammar department of each school should be formed into a company, or where the size of the school rendered it necessary, two companies; the officers to be selected from the most deserving and competent boys.

The officers thus selected to be instructed theoretically and practically by extra drills, in their respective duties. This would not occupy much time, and any boy objecting to devote this time would not be worthy of holding his position, and should be replaced by some one more deserving. Every school should possess within its limits space for a parade ground and for a few simple fixtures for gymnastic exercises. In stormy weather the exercises could be carried on indoors; for the drill possesses the advantage of affording exercise to a great number in a *small* space without disturbance and noise.

No uniform would be required, and the only expense would be the loan or purchase of 500 or 1000 short muskets, which could be used in turn at the different schools for drill or parade. A simple musket can be manufactured very cheaply, which will answer for all purposes.

The care and cleaning of the arms, the escorting and carrying them from school to school, or point to point, as required, should be the military duty of the pupils; thus expense will be saved, and the duty of prudent soldiers to take care of their equipments and do their own work inculcated.

These different school drills, always in charge of the teachers, should be visited in turn by the instructors, who would exercise a close and careful supervision over them.

Every ten companies or schools should be formed into a regiment, officered by those selected as the most capable, and who had passed the necessary examination.

Occasionally on Saturdays the regiments, in rotation, should be exercised by the instructors, in battalion movements, field manœuvres, skirmish drills, camp duties, &c. These Saturday exercises should not be compulsory, but would be eagerly looked for by the boys as an amusement.

In the proper seasons they could be marched to the suburbs for their exercises, and thus a pleasant holiday, with healthy amusements, be given them un-

der proper guidance. Any father will appreciate the advantages of such exercises and enjoyment to his boys.

In the summer season it should be found out which of the boys could not swim, and had no parents able to teach them. All such should be classed together, and means taken to instruct them in this most requisite art.

If found desirable to teach them to move together in *large masses*, (in which our militia are certainly deficient,) it can be accomplished by organizing two, three, or more regiments, into a brigade, to be commanded by the chief instructor, he selecting for his *staff* the most intelligent of the scholars who could relieve him of much of the labor which the systematic working of this large military department would render necessary. Thus those assigned to the staff would be learning the technicalities of the department and the duties of aids, secretaries, &c.

These staff officers, and any other of the pupils who showed a decided talent, should be assisted in acquiring knowledge in the military science by means of lectures, &c., from the chief instructor. An orderly system once organized, with the incentive to improvement by promotion for correct deportment, and of military disgrace for ungentlemanly and unsoldierly conduct, would soon render this military instruction of great assistance to *teachers in the schools*. Let the boys understand that disobedience or improper behavior debarred them from military honors and the whole tone of their conduct would be improved.

Of the exigencies of this war, if complicated by foreign interference, it is impossible to foresee, but every one is aware of the importance of early training upon the destinies of nations, and but few will deny the value of a well-trained battalion of selected elder boys, in case of INVASION or trouble, by their relieving the fatigue of regular troops in mounting guard at the least exposed positions, at the camps, on baggage, or for convoys; likewise to act as drill-masters for the recruits.

The above plan, which was submitted to several Boards of Education last fall, was offered as being the best adapted for *immediate use*, and is therefore provided for the instruction of the *teachers*. If, however, the *Normal Schools and Colleges* would provide systematically for this instruction, it would be far better as they are the proper fields for *permanent benefit*, as each graduate would there become fully prepared to instruct in these exercises in the public schools.

The views of the Hon. Joseph White, of Massachusetts, respecting military studies in colleges, are well worth noting. He says, "let the drill be regular and compulsory, taking the place of the very irregular and insufficient physical exercises now taken, and our colleges would be vastly improved in their educational power, and the commonwealth would in a short time have a numerous body of educated men well skilled in the military science and art, who will become teachers in our lower grades of schools and in our military companies and associations, and be competent when the alarm is sounded, to lead our citizen soldiers to the field." New Jersey has just offered a noble example by making an appropriation for military instruction in her State Normal School.

But we must look at the practical working of physical and military training in small district schools. Of necessity they are far behind, in intellectual culture, those in the cities, and owing to the small and uncertain attendance, physical and military drill would also have to be simplified. The duties of a country

life are such as not to render these exercises so necessary on the score of health, nor are the pupils wearied by such constant application to study. But how beneficial it would be in smoothing the rough, clownish manners of the country pupil by teaching him the *position of a soldier*, and correct *walking*. In respect to this, it should be the duty of the trustees to see that the drill was taught as far as practicable to the boys (calisthenics to the girls) by the teacher himself, who, if he were not already instructed from a Normal School, would find but little difficulty in mastering the details of tactics sufficiently for his purposes. With as small a number as twelve boys, company and skirmish drills could be taught; the latter is admirably suited for country schools, and would be a delight to the boys. If near the water they should be taught to swim.

It is thus we would teach our public school boys when they reach a certain age, to act together as citizen soldiers and be prepared when called upon, to do yeomen service in the country; to make it their pride as well as their duty, to defend the Country and State which so liberally educates them, let us cultivate in them a lofty and noble patriotism, which shall have its effect upon future generations, for it is upon these qualities, their intelligence and enterprise, aided by *physical strength and health*, that the FUTURE of our country depends.

Although a course of military training in the public schools would soon furnish our State with an intelligent class of soldiers and line officers, yet the *art* of war in many of its branches, such as artillery, engineering, &c., requires a scientific education, which can not be given in a private institution. Our colleges undoubtedly could, to a certain degree, supply this want. New York city possesses in its Free Academy a college which needs but the addition of two or three professorships to carry out in part this requirement, yet a *State Military and Scientific* College seems a necessity to which early attention should be given, but to prevent its becoming a tax upon the State, it should be managed somewhat upon the plan of the Polytechnic of France, namely, that pupils at large may be admitted upon passing an examination and paying the annual fee.

Offer inducements in the way of superior education and careful training, and sufficient income would be received from the *paying* scholars to cover the expense to the State. Thus, from this college, might annually graduate men educated for the most scientific and skillful pursuits of life, and who, in time of war, would richly repay the State for the care devoted to their culture.

As an incentive to the public-school boys, several of the most deserving should annually be sent to this college by the State, and to the National Military and Naval Academies.

There is yet another important matter to be considered in physical exercises for public education, more particularly in sea ports, viz., *Naval Training*.

A late report of the Shipmaster's Association has shown us that the reputation of our American vessels is deteriorating so rapidly, that unless something is done, quickly and effectually, to provide a remedy, foreign vessels will supersede ours in freighting. The necessities of our navy are too well known to need notice here, and surely these evils which assail the country at this trying moment of peril, should arrest attention.

In large seaboard cities the naval training school, which has worked so advantageously in England and Belgium, could be established very economically by the fitting up of some hall, at a slight expense, with spars, sails, &c. Here of an *evening*, lectures and classes for instruction in navigation and sea-

manship could be formed. This would be the means of improving our sailors and of forming useful citizens from those who now idle away their time around the streets and docks. The expense would be but light, and the advantages obvious to our merchant marine and navy. This would soon improve our class of sailors and officers, reduce the rate of insurance upon American vessels, and relieve us from the stain which is being cast upon us as a commercial and naval power.

The evening schools of New York city cost $73,000 per annum; a small per centage of this sum would place in successful operation an *evening nautical* school, which would enable, in less than three months, American sailor boys to acquire sufficient knowledge of navigation to aspire to the quarter deck. The handling of heavy guns and the principles of naval gunnery could also be taught. If a war with Great Britain breaks out, are we to be found slumbering in this respect, and must we wait for the *first gun* before taking active measures!

We are a peace-loving and domestic people, and we have indulged in the delusive fancy that peace was to shine over us forever, until rudely awakened from our dreams by a formidable attack at the very foundation of our nationality. Every family circle is represented in that mighty army which is battling for the Union, and we know that much of the suffering caused to our brothers by this new and unexpected calling, is due to the defects of their physical education, and to the want of a sufficient number of well trained officers. But the war is upon us and we must meet it as may best become a free nation and be better prepared for the future.

It is the proud boast of England that in time of war she is "Ready, aye Ready," but a much prouder and nobler cry for us would be, the prompt "Here" at the roll-call of our militia when summoned, like the minute men of the Revolution, to the defense of the country. We want no large standing army. In times of peace let our merchants, artisans, farmers, and mechanics, enrich and develop the resources of the country. It needs their industry and will amply repay their toil. But let them be trained and educated from school-days to their military duties, and at the first note of war let that response of "Here" come cheerfully from our rich prairie lands, from our counting-houses, from our machine shops, from the decks of far off vessels and from our public schools,—one mighty cry of POWER and SELF-RELIANCE from a noble militia, possessing a thorough *knowledge of its duties;* intelligent and earnest in the right; patriotic and strong in its devotion to freedom.

A few words to those who fear the tendency of these exercises to instil a warlike and blood-thirsty spirit, and we will close. To them we say, we would emulate the ancients only so far as we can obtain from them some of their earlier and nobler traits of patriotism, courage, strength, endurance, and health. Let us picture what effect this training would have upon individual character.

Let us take the example of a young lad, entering the public school in the primary department, with perhaps a sickly, indolent disposition, and somewhat careless and slovenly in his appearance.

We know very well from the present system of studies, that his mind will be well cared for, and therefore pass to the effect of the physical training upon him.

The first lesson then is to stand in an erect and commanding attitude, with his chest well expanded, then his careless, slouching steps, with hanging head,

are soon changed to the brisk, smart *walk* of a young gentleman. Calisthenics and exercises proportionate to his strength, and tending to develop his limbs very soon improve his health and impart a youthful vigor and energetic purpose to his motions, which are so much to be admired in young lads and give such rich promise of the future manhood. He soon learns exact and unhesitating obedience, and is taught by precept and example, that no small advantage in appearance is to be derived from a clean face and well brushed clothes. Is it to be denied that he thus learns habits of order, activity and cleanliness, which will be invaluable to him in after years?

But his greatest ambition, the goal of all his hopes,—the reward for which he studies diligently, is active and neat in his deportment, docile and obedient to his teachers,—is to be promoted to the grammar department or higher classes, where the boys have military exercises. He looks with longing eyes at their neat, orderly ranks, as they form for drill or parade; their brightly polished shoes, neatly brushed clothes and well kept arms. All this is something to look forward to, and when he has accomplished it, has he not to strive by activity to win his *grade* and by self-control and obedience prove himself deserving to command others? Manhood, when it arrives, finds him bright, active, self-reliant and ready to become a public spirited member of society.

Let the necessity of military exercises be placed before the boy in a patriotic light and it will induce him not only to take greater care in the execution, but likewise implant a still greater love of country from the very knowledge that some day he may be of use to her,—of use to her in the pulpit, in the legislative forum, in the busy pursuits of industry and the various walks of life. And if the necessity again calls for action, or if the present war is of long duration and tests the strength and perseverance of our national character, let us not shrink from the ordeal, but with a firm reliance upon an Almighty God and a righteous cause, let us go forth in this good fight, we of this generation and our children, and faithfully discharge the duties of Christian soldiers in defense of truth, justice, and our country.

XI. NEW GYMNASTICS.

BY DIO LEWIS, M. D.

I offer nothing upon the importance of Physical Education. If among my readers there is one who doubts, I ask him to close these pages and look about him. On every hand he is met by drooping forms, feeble chests, dyspepsia, decayed teeth, putrid breath, cold extremities, crazy nerves, brains on fire.

Education means a preparation for the successful and easy performance of the duties of this life. Education means health, strength and happiness.

Amid such a diseased and decaying people, what is the first duty of the true educator? Is it to multiply Greek Grammers? Should he not rather, as among the Greeks, begin with the redemption of the body?

The body is the foundation of the man. It precedes the higher nature in the order of creation and development. Its claims are primary.

Our schools present painful spectacles. A hundred crooked, feeble boys and girls are gathered in an unventilated room, occupying seats and desks, ingeniously contrived to intensify their deformities and weaknesses, while the teachers cram their brains with the verbiage of dead languages.

What would be thought of that mental culture, which should exclude all but mathematics? Is not the true mental development symmetrical?

Education as a *whole* must be made symmetrical! Then what should he thought of that system of national education, which ignores the body, leaving it to deformity and decay, while confining its educational appliances exclusively to the intellect? Such is the genius of the public schools of our country! A few

observers and philosophic thinkers, among whom I may mention HORACE MANN, have been painfully impressed with this radical error. They have spoken of it as the rock on which the nation may go to pieces.

A few Educational Boards, oppressed with the error we are considering, have, in their reports, undertaken to free themselves from a painful responsibility by declaring that the object of the public school is to educate the mind—that the training of the body like that of the soul, belongs to another institution. The gymnasium and the church, it is said, are designed for the body and the soul, while the public school is established for another special work, viz: the culture of the intellect.

But unfortunately for this logic, the schools under the management of these very Boards, daily enjoy the reading of the Bible for their souls, with ventilation and a beautiful play ground (which may have cost thousands of dollars) for their bodies. And in the same reports, which ignore the claims of the body, they speak earnestly of the importance of ventilation, the free introduction of sunshine, and other hygienic measures which tend to preserve the health of the body.

Who informed these gentlemen that the exclusive object of the public school is intellectual culture? In which article of the school laws is it so stated? The plea is a poor subterfuge unworthy of an American Educational Board.

The object and aim of our public schools is Education—harmonious and complete—the fullest possible preparation for the successful performance of the duties of the citizen.

I will not insult the common sense of my readers by an elaborate argument in favor of physical education, as an important part of the general development. In every part of the country, we observe attempts to introduce gymnastic exercises into the public schools, showing a very general appreciation of the obligations of the State in this direction.

Each school should have its gymnastic teacher, who may be one of the regular teachers in the institution; every school should have abundant supplies of gymnastic apparatus. When a young lady, for example, enters the school, the first question asked in the examination, which is to determine her place in the

classes, should be, not, how have you progressed in latin? but, "Miss Mary, how is your spine?"

In determining the mental status, the true teacher begins, not with the last chapter, but with the first. He first learns whether the candidate can read, spell, and write. The question of French comes afterward. For a still better reason he should begin farther back, and ascertain whether her spine, lungs, stomach, or skin, requires education. If her spine is weak, and unfit for the labors of life, she is at once placed in a class which spends half an hour every day in such training as shall make the spine erect and vigorous.

The time required to give a young lady a superficial knowledge of music, enabling her to play a few tunes on the piano, would, if wisely devoted to a judicious training of her spine, save her entirely from that life-long train of sufferings, which a large majority of American women have to endure from weakness and pain in this central and vital part of the body. There are very few of the pupils in our public schools, even the feeblest of the girls, who would require more than an hour a day to be transformed in two or three years from crooked, pale, nervous creatures, into erect, ruddy, vigorous young women.

And when we remember that the mental progress would thereby be greatly enhanced, it is not extravagant or fanatical, I think, considering the present condition of American youth, to declare that physical education in our schools is the imperative demand of the hour.

Are we not sufficiently advanced in our conceptions of a true human culture, to abandon the absurdity of demanding of the young the conjugation of a Greek verb, while we make no provision against the early disease and death of the lungs with which that puzzling task is accomplished?

I do not mean to disparage the value of mental culture; I am only advocating a change of policy which shall greatly enhance its comprehensiveness and thoroughness. So far is it from being true that our children study too many books and achieve too much in mental acquisitions, it is doubtless quite within the truth that they do not learn from books one fifth as much as they should. The fault is not that they have too much intellectual

culture, but that they are sadly neglected in another department, which is indispensably necessary to any considerable degree of success in that culture. I shall not undertake to prove what is self evident, namely: that a vigorous child will accomplish in intellectual pursuits infinitely more than one who has spinal weakness and indigestion. And were the body a thing to be despised and kicked, still as a means by which to secure the highest mental grasp, activity and endurance, it must be fully and conscientiously educated. But when we remember that instead, it is one of God's most wonderful creations, endowed with amazing instincts and faculties, and no less an integral part of man than his soul, and that during his earthly life the conditions of the body determine those of the higher nature, the necessity for its thorough education becomes very obvious.

How can such education be most easily and fully realized?—Several prominent educators who have written on this subject, reply, "by encouraging the usual sports and games of children." No physiologist ever made such an answer. These games and sports are invaluable and should be encouraged in every possible way! New games and plays should be introduced, thus securing a variety, which will sustain and deepen the interest. Every nation has its peculiar games for children. If these were carefully gathered and taught to our little ones, and such apparatus as might be required, were furnished, an important contribution would be made to their happiness and health. But all this is not enough. Writers and lecturers who have maintained that the true policy, by which to secure adequate physical culture for children, is to be found in such a course, have supposed, it would seem, that all that children need is exercise, no matter what, only that it is exercise. I inquired of a highly intelligent educator, who has written spiritedly in favor of games and sports, and against scientific gymnastics, why he was not willing to adopt the same policy with regard to the mind? I said to him, "you certainly cannot deny that lectures and newspapers, whist and chess, call for a vigorous exercise of the mind, and they certainly interest children more than algebra and Greek. The boy will pursue chess with more interest than he can feel in geometry." It was unnecessary to urge upon him the folly of such a

course. He declared at once that it would fail to secure symmetry, patience and health of mind. "To secure these," he said, "we must have the scientific training of the organized school and college." Then I asked him if he thought the body was a single organ, which, if exercised, no matter in what way, was sure to grow into right proportions? If, on the contrary, it was not a complicated machine of many organs, for the proper culture and development of which, discriminating appliances were necessary.

This thought is new to America, but is not a novelty in many of the advanced European nations. And we find embodied in the matchless statues of Greece, imperishable proofs that it constituted the fundamental idea in their educational conceptions.

In view of its novelty in this country, I may be pardoned for introducing one simple illustration.

The American boy has drooping shoulders. This leads to a change in the position of the organs of the chest and abdomen. No ordinary play even tends to correct the evil. Cricket, base-ball, marbles, etc., fail to secure the desired erectitude. Girls have no games tending to correct this deformity, which among them is almost universal. But it is quite easy, as all students of physical education have learned, to make make all stooping young people quite erect by special gymnastics. *And these special gymnastics are not less fascinating than the most popular games.*

What is true of the defect I have mentioned, is not less true of a hundred and one other abnormal conditions, which are only susceptible of complete removal by the same discriminating culture, which is known to be indispensable to a systematic development of the intellect.

My object is to present a new system of Gymnastics. Novel in philosophy, and practical details, its distinguishing peculiarity is a complete adaptation, alike, to the strongest man, the feeblest woman, and the frailest child. The athlete finds abundant opportunities for the greatest exertions, while the delicate child is never injured.

Dispensing with the cumbrous apparatus of the ordinary gymnasium, its implements are all calculated not only to impart strength of muscle, but to give flexibleness, agility and grace

of movement. None of the apparatus, (with one or two slight exceptions,) is fixed. Each and every piece is held in the hand, so that any hall or other room may be used for the exercises.

Public Interest in Physical Education.

The true educator sees in the present public interest in physical education, a hope and a promise.

And now he is only solicitous that the great movement so auspiciously inaugurated, may not degenerate into some unprofitable speciality.

One man strikes a blow equal to five hundred pounds; another lifts eleven hundred pounds; another bends his back so that his head rests against his heels; another walks a rope over the great cataract; another runs eleven miles in an hour; another turns sixty somersets without resting.

We are greatly delighted with all these—pay our money to see them perform; but as neither one of these could do what either of the others does, so we all know that such feats, even if they were at all desirable, are not possible with one in a thousand. The question is not what shall be done for these few extraordinary persons. Each has instinctively sought and found his natural speciality.

But the question is, what shall be done for the millions of women, children and men, who are dying for physical training? My attempt to answer this momentous question will be found in this work.

Here are two boys. One is quiet, studious, intellectual, pre-

cocious! "He does not play like other boys; his mind is always on his books." The other is noisy, prefers squirrels to books; is not precocious, but plucky, restless.

One prefers the conversations of old men, and wise men. The other, the dare-devil sports of the young fellows who stop at nothing. One sits in the corner conjugating verbs. The other is the leader in a game of "Pom pom pull away." One never speaks above the low tones of a gentlemen. The other screams until the neighbors all declare they "shall go crazy." One becomes a monotonous, premature old man, occupied in some third class literary labor, or acting in the capacity of a book-keeper—the victim of dyspepsia and bad luck. The other, with rapid, vigorous strides, rushes on to a noble and all-conquering manhood.

A boy's principal business is not to cultivate the graces and knowledge of a man, but to lay the *firm foundations* of a strong enduring manhood; which are found in a symmetrical, elastic, enduring body.

School Seats and Desks.

I have already alluded to an evil, which lies at the very threshold of this work, and which is without doubt the most mischievous of physiological school errors. I refer to the desks and seats now in use. The physical welfare of American youth demands a radical change in school furniture.

Figure 1.

Figure 2.

Fig. 1, exhibits a fruitful source of our characteristic round shoulders.

Fig. 2, presents a better desk, and the change of position in the pupil.

But the model desk, meeting every want, is shown in *Fig.* 3. It will be seen the top is adjustable. It may be let down nearly horizontal, for writing, or it may be raised nearly perpendicular, for study.

Figure 3.

Figure 4.

On the top is an *adjustable* bar with a pair of brass fingers, which will hold the book in any position, dispensing with the hands of the pupil, and thus avoiding another very fruitful source of round shoulders.

As stooping forms result from the use of the desk now in vogue, erect forms would as certainly result from the introduction of the physiological desk.

In *Fig.* 4, an additional bar is seen, designed to support a large lexicon, which must prove most grateful to students of the languages. The seat is likewise adjustable. It may be raised or lowered several inches in a moment. No teacher or physiologist has examined this desk, so far I know, without the most unqualified commendation. The desks are so placed in the school room that pupils are brought more completely into view by the teacher than in the old way.

These desks and seats are not liable to get out of repair, cost very little more than the present desk, and are noiseless.

The ordinary desk may with a trifling expense be altered into the physiological desk.

All persons who will send to me $6, shall receive a beautiful model of the desk top, which will fully instruct them in regard to the change of the old desk into the new. The cost of making the change is less than fifty cents per desk. The manufacturer of the models, will send carefully prepared directions in reference to the details. While the new desks and seats are much better, I advise those who have the old ones, to alter them.

I may remark here in reference to two or three articles which I shall advise the public to order from Boston, that I cannot avoid giving such advice. I know there are certain improvements imperatively demanded, and the articles are manufactured at no other point. It would not be difficult to say, "send to John Smith," but, as the fact is, I get the articles manufactured myself, I prefer to say frankly, "send to me." And when I assure the public that the experiments in my efforts to improve the school-room, have proved an expense rather than a gain, I may be excused for what would otherwise seem a business announcement.

Dress for Gymnastic Exercises.

Persons may exercise in the New Gymnastics without any change of dress. But if they would derive the largest profit from these exercises, I recommend the dress illustrated in the two annexed figures.

A written description is hardly necessary, and I will simply remark that the lady's waist and shoulders must have *perfect liberty*. Indeed, it would be better to have the dress drag a foot on the floor, than press an ounce upon the waist or shoulders.

Bag Exercises.

The use of small bags filled with beans, for gymnastic exercise, was suggested to my mind six years since, while attempting to devise a series of games with large rubber balls. Throwing and catching objects in certain ways, requiring skill and presence of mind, affords not only good exercise of the muscles of the arms and upper half of the body, but cultivates a quickness of eye and coolness of nerve very desirable. Appreciating this, I employed large rubber balls, but was constantly annoyed at the irregularities resulting from the difficulty in catching them. When the balls were but partially inflated, it was observed the hand could better seize them. This at length suggested the bean bags. Six years' use of these bags has resulted in the adoption of the following, as the best size and shape:

The material is a strong bed-ticking. Bags for young children should be, before sewing, seven inches square; for ladies, nine inches; for ladies and gentlemen exercising together, ten inches; for gentlemen alone, twelve inches. Sew them with strong linen or silk thread, doubled, nearly three quarters of an inch from the edge, leaving a small opening at one corner to pour in the beans. Fill the bags three quarters full, and they are ready for use. If used daily, once in two weeks they should be emptied and washed. To allow them to be played with after they are soiled, is pretty sure to furnish much dust for the lungs of the players, beside soiling the hands and clothes. There cannot be too much care exercised in regard to this point of cleanliness. Before the beans are used the first time, they should be rinsed with water until it runs from them quite clean, when they must be dried; and every month or two afterwards this cleansing should be repeated.

The dirty carelessness with which these bag exercises are generally managed, makes them a positive nuisance.

Premising this indispensable preparation and care of the bags,

I shall now proceed to give those exercises which I have found best adapted to schools and the gymnasium.

Fig. 1 represents a series of hoops lashed between two strong ropes, and stretched across the room, the ropes fastened on one side of the room into staples, and on the other running through pulleys. By these means the ropes may be drawn very taut. It is well to fasten the staples and pulleys into slides, that the altitude of the hoops may be altered, for persons of different ages.

Nearly all the exercises with bags are greatly improved by throwing them through the hoops. It will be observed the cuts represent the players as throwing the bags quite high. This has reference to the hoops. But the bags may be thrown between the players without the hoops.

Figure 2.

Figure 3.

No. 1. Arrange yourselves in two classes. Classes face each other, six feet apart. Members of one class will each have a bag. The other class will have no bags. Each person will play with the one standing exactly opposite. Hold the bags under your chins. (*Fig.* 2.) When I give the word, each couple is to throw its bag backward and forward ten times, counting both ways. At the beginning of this and the following exercises, the leader will announce how many times the bag is to be thrown.

Each couple will play as rapidly as possible, and as each finishes, the two players will hold up their hands, and cry out the number in a loud voice. Now ready! *one, two,* THREE!! The bag is always to be thrown from the chest, never to be tossed from the lap.

No. 2. Same as the last, except the bag is thrown and caught with the right hand. The position is well shown in *Fig.* 3.

No. 3. Same as the last, but with the left hand. When the right hand throws, the partner's right hand must catch, and so with the left.

Figure 4.

Figure 5.

Figure 6.

No. 4. In this one, the bag is thrown with both hands, from the position seen in *Fig.* 4.

No. 5. Same as the last, except the bag is thrown with the right hand, as shown in *Fig.* 5. The unoccupied hand, in this and all other single-handed bag exercises, is to be held on the corresponding side, with the arm akimbo.

No. 6. Same as the last, except with the left hand.

No. 7. The bag is to be thrown over the head from the position seen in *Fig.* 6.

No. 8. To be thrown from the position seen in *Fig.* 7, with the right hand. The one who catches must receive it, while the left hand grasps the arm in the same way.

No. 9. Same as the last, only using the left hand.

No. 10. Standing with your right side toward your partner,

hold the bag on the point of the elbow, being sure to keep the fore-arm vertical; (*Fig.* 8) throw from this position the number of times announced by the leader. To be caught in the hands.

Figure 7.

Figure 8.

Figure 9.

No. 11. Same as the last, except the left side is turned, and the bag is thrown from the left elbow.

No. 12. Hold the bag as represented in *Fig.* 9, and toss to your partner. He will of course return it in the same manner to you, and thus it will be tossed backward and forward the number of times indicated by the leader. As in all the other exercises thus far given, each couple upon reaching the indicated number, will hold up their hands and cry out that number in a loud voice.

Figure 10.

Figure 11.

Figure 12.

No. 13. Turning your right side to your partner, throw from the position represented in *Fig.* 10. Your partner catches the bag, standing in the same attitude.

No. 14. Same as the last, except you turn your left side to your partner, and throw with the left hand, either without bending the knees, as seen in *Fig.* 11, or bending them, as seen in *Fig.* 10.

No. 15. Again turn your right side to your partner, and throw the bag from the position seen in *Fig.* 12.

No. 16. Same as the last, except turning the left side, you throw with the left hand.

Figure 13.

Figure 14.

Figure 15.

No. 17. Turn your back to your partner, and bend backwards, so that you can see him. He bends back, so that he may see you, and then you throw the bag to him as represented in *Fig.* 13. Always cry *ready!* that he may not be kept waiting too long in an uncomfortable position.

No. 18. Face your partner, and throw from the position represented in *Fig.* 14, holding the bag on the back of the hand.

No. 19. Same as the last, except the left hand is employed.

No. 20. Face your partner, and throw the bag around the back and over the opposite shoulder, as shown in *Fig.* 15.

No. 21. Same as the last, except you use the other hand.

No. 22. Each couple having ten bags; you throw to your partner, and he catches as many as he can hold, folding his

arms. (*Fig.* 16.) This one will not ordinarily be played in class, as the number of bags will scarcely be sufficient.

No. 23. The two classes will stand as represented in *Fig.* 17. Place ten bags on a chair or box at the feet of the first player of each class. The leader gives the word, *one, two, three!* and the two classes compete in passing the bags over their heads backwards, to the foot of the class, when they whirl round and return them to the head. The class which has the entire ten on the chair or box at its head, first, counts one in the game. It is usual to make the game three, five, or ten.

Figure 16.

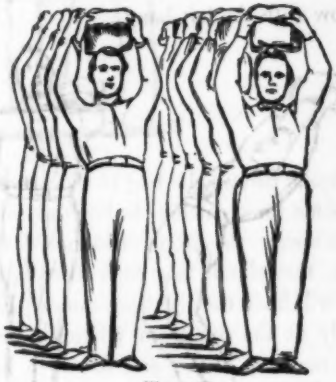


Figure 17.

No. 24. Let the two classes face each other again, and pass the bags as in the last, except that they are carried along in front and as high as the chest, being careful not to stoop forward.

No. 25. Let the bags be all placed at the head of one of the classes. We will call this class No. 1; the other class No. 2. The first player in class No. 1, throws a bag to the first player in class No. 2, who throws it back to the second player in class No. 1, who throws it back to the second player in class No. 2, who, in turn, throws it to the third player in class No. 1, and so on, working it down to the foot of the class.

But one bag is not allowed to make the trip alone; all follow, one after another, in rapid succession.

In this game, the bags are all thrown from the chest with both hands, as represented some pages back, in No. 1, of the bag exercises.

No. 26. The whole company may now be divided into trios, each trio playing with three bags, as represented in *Fig.* 18.

Figure 18.

Each one throws the bag to the player at his right hand, and at the same time, catches the bag thrown from the player on his left.

To secure the proper distance between the players for this game, they should take each other by the hands and pulling hard, they will have the right positions. Each player must look constantly at the one from whom he receives the bags, and never for a moment at the one to whom he throws. If they forget this rule, the bags will soon fall to the floor.

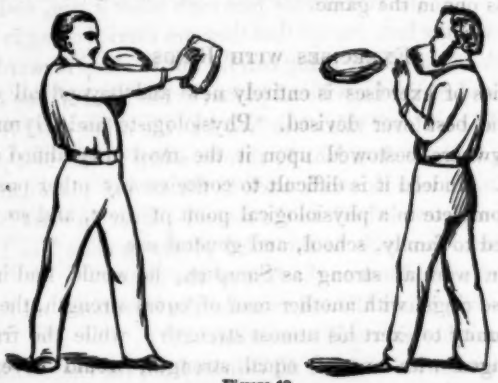


Figure 19.

No. 27. Same as the last, except the bags are passed the opposite way.

No. 28. The company is again divided into couples, and each couple plays with two, three, four, or more bags. A throws a bag with his right hand to B, who catches it with his left hand, and immediately changing it to his right, throws it back to A, who catches it with his left, and who changing it to his right, throws it back again to B. (*Fig.* 19.) Two, three, four, or five bags can be made to perform this circle between two players at the same time.

The bags, in this as in all the other bag exercises, except one, should be thrown and not tossed.

No. 29. Same as the last, except the bags are thrown with the left and caught with the right hand.

No. 30. Now the players will stand in two classes again, the classes to be six feet apart, and the players in each party to be six feet from each other. Place six bags on a chair at the head of each class. Upon the word *one*, *two*, THREE! the first player in each class seizes a bag and runs with it to the second player, who carries it to the third, who in turn rushes to the fourth, and so on to the foot of the class. But one bag is not allowed to make the journey alone. One at a time, the whole six are hurried onward. Instantly and without any signal they are sent back to the head of the class in the same order. The class which has its six bags on the chair at the head of the class first, counts one in the game.

Exercises with Rings.

This series of exercises is entirely new and beyond all comparison, the best ever devised. Physiologists and Gymnasts have everywhere bestowed upon it the most unqualified commendation. Indeed it is difficult to conceive any other possible series so complete in a physiological point of view, and so happily adapted to family, school, and general use.

If a man were as strong as Sampson, he would find in the use of these rings, with another man of equal strength, the fullest opportunity to exert his utmost strength; while the frailest child, engaged with one of equal strength, would never be injured.

There is not a muscle in the entire body which may not be

brought into direct play through the medium of the rings. And if one particular muscle, or set of muscles is especially deficient or weak, the exercise may be concentrated upon that muscle or set of muscles.

Wherever these rings are introduced they will obtain the highest favor and awaken the most earnest enthusiasm.

Figure 1.

Figure 2.

The ring is generally turned from cherry wood, and when finished measures six inches in diameter, while the body is one inch thick. It should be highly polished, especially on the inner part. *Fig.* 1 gives a good idea of the ring.

No. 1. Standing in the position represented in *Fig.* 2, the end of the right toe against the right toe of your partner, the toes meeting on a straight line drawn through the entire hall, on which all the players stand, and placing the left foot at right angles with the right foot, as seen in the figure; pull hard and twist the right arm hard from right to left and left to right ten times, keeping time to the music.

Be careful in this, as in all other exercises with the ring to draw the shoulders well back and keep the head erect.

No. 2. Same as the last, but using the left hand with the left foot forward.

No. 3. Join both hands with two rings, and place the right toe against your partner's right toe as in No. 1, being sure to keep the foot which is behind at right angles with the one in front,

(which I may say here, is to be looked after with much care through this whole series, whenever it is possible,) then pull hard, ten times, and twist the arms, keeping time to the music.

No. 4. Exactly the same as the last, but with the left foot forward.

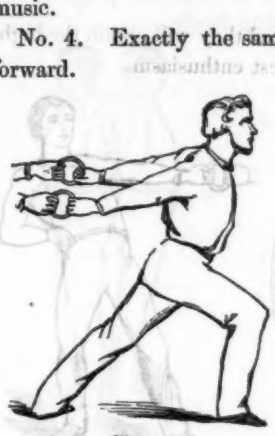


Figure 3.

Figure 4.

No. 5. Without letting go the rings, turn back to back, place the outside of your left foot against the same of your partner, in the same way you would push against the wall of the room, and pulling hard in the position represented in *Fig.* 3, twist hard ten times, keeping time to the music.

No. 6. Same as the last, but with the right foot behind.

No. 7. Turn face to face, raise the hands as high as you can over the head, standing about two feet and a half apart, bring the rings down to the floor without bending the knees, as represented in *Fig.* 4, ten times, and all the following exercises ten times. In the performance of this you must not bend the elbows, which you can avoid doing by carrying the rings outward at each side. (In the ring exercises, when your pupils, standing their faces toward each other, turn their backs, see that they do not let go the rings.)

No. 8. Standing as in the last exercise, but only two feet apart, place the rings in the position seen in *Fig.* 5. Now as the arms on one side rise, the arms on the other side fall, keeping time to the music. Be careful not to bend the arms at the elbows,

which of course can be prevented in this as in many other exercises, by carrying the hands outward at the side. In this exercise a good deal of force should be used, so that when the ring is carried up on one side, it goes far beyond the perpendicular line, the bodies of the players bending freely.

Figure 5.

Figure 6.

No. 9. Same as the last, except the two rings go up and down simultaneously.

No. 10. Standing as in the last two exercises, the hands hanging down as low as may be, and keeping them in the same relation to each other, swing them from side to side as far as you can.

No. 11. Same as the last, except that instead of swinging the hands from side to side, they make a complete circle, being carried over the head as well as down between the bodies of the players.

No. 12. Same as the last, except the circle is made the opposite way.

No. 13. Back to back, as seen in *Fig.* 6; thrust the rings up with great force, each player keeping his two arms exactly parallel.

No. 14. From the same position seen in *Fig.* 6, thrust the rings out sidewise, as in all the other exercises, ten times.

No. 15. Same as the last, except the rings are thrust downward by the hips.

No. 16. The last three, consecutively, ten times.

No. 17. Take the position seen in *Fig.* 7; your partner the same. The inside of your left foot to the inside of his left. Draw your left hand as far back past your left side as possible, dragging your partner's right hand after it. At the same time he has done the same thing with his left. Do the same with your right hands. And so continue to alternate. Do this strongly, pushing your hand past your partner's side as far as possible, at the same time pulling his hand as far past yours as possible.

Figure 7.

Figure 8.

No. 18. Same as the last, except the right foot is forward. Be sure in this as in all others, that your own feet are at right angles.

No. 19. Same as the last two, except the feet go with the hands. When you thrust your right hand forward, the right foot goes forward too. When the left hand goes forward, the left foot goes with it.

If this be well done. the feet and hands making long sweeps to the music, it not only presents a fine, animated appearance to the spectators, but brings all the muscles of the body and limbs into fine play.

No. 20. Back to back, touching each other's heels. Each lunge out with the right foot in the direction the toe points, the feet being at right angles, and raise the hands over the head so they touch, thus reaching the position seen in *Fig.* 8. Now return, heels together, arms at the side, lunge out with the left

feet in the same way, and thus alternate, keeping time to the music.

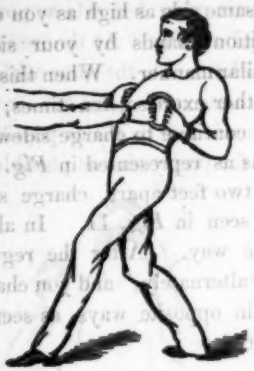


Figure 9.

Figure 10.

No. 21. Standing as represented in *Fig.* 9, your partner the same, with the inside of his left foot to the inside of your left foot, and holding the rings as shown in the figure, push them vigorously toward your partner, simultaneously thrusting them past his body as far as possible. He pushes them back in the same manner, and so on.

No. 22. Same as the last, except the right foot is pushed forward, instead of the left.

Figure 11.

Figure 12.

No. 23. Stand back to back, heels all together; both step out sidewise in the same direction as far as you can reach, and at the same instant raise the hands on the same side as high as you can, then returning to the upright position, hands by your sides, charge out at the other side in a similar manner. When this has been done both ways, as in every other exercise, ten times, the leader cries "alternately," and you continue to charge sideways as before, only in opposite directions as represented in *Fig.* 10.

No. 24. Standing face to face, two feet apart, charge sideways as in the last exercise, and as seen in *Fig.* 11. In alternation with this, charge the opposite way. After the regular number of times, the teacher cries "alternately," and you charge out sideways with your right feet in opposite ways, as seen in *Fig.* 12; alternate with the left feet.

Figure 13.

Figure 14.

No. 25. Standing back to back, charge, your faces both in one direction, with bodies fronting the same, as shown in *Fig.* 13. When the teacher cries "*change!*" you must change sides with each other, still facing in the same direction. Keep time to the music with your feet, when changing sides, and as soon as you make the change, go on with the charging, using of course, the other hands and feet.

No. 26. Joining only with your right hands, and standing apart far enough to make the arms straight and horizontal between

you, charge as seen in *Fig.* 14; the left hand and foot the same.

No. 27. Joining with both hands, charge right and left alternately, each time, as represented in *Fig.* 14.

Figure 15.

Figure 16.

No. 28. Stand, each with his own heels together, as seen in *Fig.* 15, and perform the exercise exhibited in the figure. As the hands on one side go up, the hands on the other go down. So alternate the regular number of times, when you will do the same simultaneously, the hands on both sides rising and falling together.

No. 29. Standing as seen in *Fig.* 16, except that the inside of the right foot should be exhibited as pressing against the inside of your partner's right foot, you draw back from each other as far as you can, and then come up, touching each other's chests, all without bending the elbows.

No. 30. Same, with the left foot forward.

In the next number of the American Journal, I shall have the honor to present the remaining half of the Ring Exercises for Couples. Those in which three, four, five or more persons are interlinked in the execution of gymnastic tableaux, are not yet sufficiently developed to justify publicity. In two years I hope to be able to publish them. In the gymnastic field, no other means is destined to accomplish so much as the Ring.

No. 31. Standing as seen in *Fig.* 17, draw far away from each other, keeping the arms precisely horizontal. Immediately approaching each other again, touch the shoulders as in the figure, and so continue ten times, keeping time to the music.

No. 32. Same as the last, with the feet changed.

No. 33. Standing face to face, raise the hands on one side as in *Fig.* 18. As these hands are brought down to the side, raise those on the other side in like manner, and so alternate ten times.

Figure 17.

Figure 18.

No. 34. Back to back, and raise the arms on one side as in *Fig.* 18, but carry the hands completely over the heads and down on the other side of the body. Alternate with the arms on the other side, ten times.

No. 35. Carry the hands all over together as seen in *Fig.* 19. Change thus from side to side, twenty times, always keeping time to the music.

No. 36. Turn face to face, and now back to back, and again face to face, and so continue to change, alternating the sides toward which you turn.

No. 37. Perform the exercise seen in *Fig.* 20, being sure that you draw the arm of your partner directly into your axilla or arm-pit. After alternating twenty times, then draw the arms back and forth simultaneously, ten times.

No. 38. Join right hands with your partner with one ring,

and stand apart so that your arms are straight and horizontal. Advance your right foot two feet, keeping the two feet at a right angle. Now push your chests as near together as you can, without bending your knees or elbows, as seen in *Fig.* 21. Now drawing the arms back to the horizontal on the next beat of the music, carry the hands down as low as possible without bending knees or elbows on the next beat. Now back to the horizontal, and then up as high as possible, and so continue ten times.

No. 39. Same with the left hands, the left foot being pushed forward.

No. 40. Join the right hands again, holding them in the horizontal position. Now push them sidewise as far as possible without bending knees or elbows. On the next beat bring the arms back to the straight line between you, and now carry them sidewise the other way, and so continue ten times.

No. 41. Left hands the same.

Figure 19.

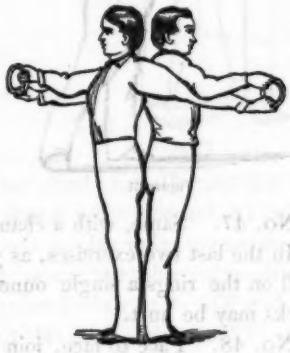


Figure 20.

No. 42. Join right hands again. Instead of thrusting the hands directly upward, or sidewise, carry them obliquely upward, and after bringing them back to the straight, horizontal line, carry obliquely downward, and so continue ten times, being careful not to bend knees or elbows.

No. 43. Still use the right hands, and carry them obliquely upward the other way, and downward the other way.

Nos. 44 and 45. Same with the left hands.

No. 46. Back to back, and place the outside of the left foot against the outside of your partner's left foot. Right foot well forward. Now raise the hands over the head as seen in *Fig.* 22, (I see the artist has not placed the outsides of the left feet against each other, as he should have done) and draw away from each other, bending the knee of the leg which is pushed forward, and thus sink down somewhat. As you come back, touch your shoulders against those of your partner, and thus repeat ten times.

Figure 21.

Figure 22.

No. 47. Same, with a change of feet.

In the last two exercises, as you draw away, you must not pull on the rings a single ounce. If this be forgotten, your backs may be hurt.

No. 48. Face to face, join the right hands, and place the tips of the right toes against each other, and the left feet at right angles two feet behind. Whirl the right hands, making as large a circle as possible without bending the elbows or knees. After whirling ten times one way, then whirl ten times the other way.

No. 49. Same with left hands.

No. 50. Back to back, two feet apart, each with his own heels together; raise the hands as high as possible over the heads, and bring them down as seen in *Fig.* 23, five times.

No. 51. Join the right hands, and turn your right side toward your partner, keeping the right arms straight between you. Both must now step straight forward with the right foot as far as you can reach, while the right arms are kept horizontal as seen in *Fig.* 24.

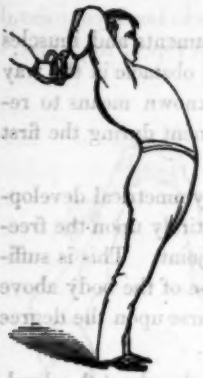


Figure 23.

Figure 24.

No. 52. Face the opposite way, and use the left arms and feet in the same manner.

Figure 25.

No. 53. Stand as shown in *Fig.* 25. Pull your arms directly forward, which of course will draw your partner's arm directly backwards. Then he draws yours backwards in like manner, and so continue ten times.

No. 54. Back to back, your shoulders touching your partner. Arms perpendicular over the head. Draw your right arm directly forward. Simultaneously with this your partner does the same thing. Now the left arms the same, and so continue to alternate ten times. And last draw both of your arms forward; immediately your partner does the same, and so continue to alternate ten times.

Exercises with Wands.

A straight, smooth stick, one inch in diameter, and four feet long, (three feet for children) with round ends, is known in this Gymnasium as a "Wand," and is highly prized. It is used to cultivate flexibility, and is equally useful to persons of all ages and degrees of strength.

As a stiff, inflexible condition of the ligaments and muscles connected with the shoulders is the principal obstacle in the way of beginners, and as the wand is the best known means to remove this stiffness, it should be made prominent during the first few weeks or months of the training.

It is perhaps unnecessary to say that the symmetrical development of the upper half of the body turns entirely upon the freedom with which one can use the shoulder joint. This is sufficiently obvious, when we reflect that exercise of the body above the waist depends upon the arms, and of course upon the degree of freedom with which we can use the arms.

While it cannot be denied that certain muscles about the shoulders and chest may be developed to any degree, and the shoulders remain drooping and stiff, it is quite as undeniable that general and symmetrical development of that part of the body, (which is almost universally distorted and deficient among Americans,) can be achieved only by complete liberty about the shoulder joint, through which as a fulcrum or centre, all considerable training of the upper part of the body is derived.

I had pursued the study of Gymnastic Culture but a short time, before I saw the great importance of the wand, in a system of training adapted to the American people.

I have invented a very extended series of these exercises, some of which are here described and illustrated.

No. 1. Divide the wand into three equal parts with the hands, and hold it as represented in *Fig.* 1. Thrust it downward close by the legs with much force, and again bring it up by the chin, holding the elbows high as seen in the figure, and so continue twenty times.

No. 2. From the position seen in *Fig.* 1, carry the wand

directly upward as high as you can reach, and back to the chin, ten times.

Figure 1.

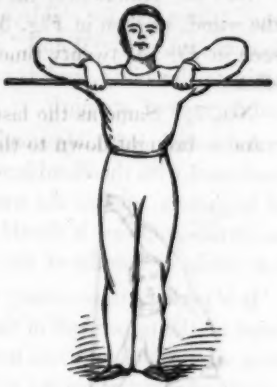


Figure 2.

No. 3. From the highest position in No. 2, bring the wand down to the knees and back again, twenty times, *without bending the elbows*.

No. 4. Holding the wand high over the head, bring it down on the back of the neck, ten times, as seen in *Fig*. 2.

No. 5. Same as the last, except every second time the

Figure 3.

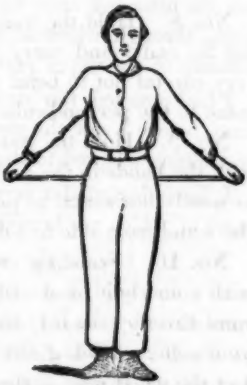


Figure 4.

wand is brought down to the chin, being careful that every time

that the wand is carried upward, it is carried as high as possible and with much force.

No. 6. Hands over the head, but this time at the ends of the wand, as seen in *Fig.* 3, and now bring it down behind as seen in *Fig.* 4, twenty times, *being very careful not to bend the elbows.*

No. 7. Same as the last, except that every second time the wand is brought down to the knees in front.

Figure 5.

Figure 6.

No. 8. Hold the wand directly over the head, hands grasping the ends, and carry it from side to side, (*Fig.* 5.) being very careful not to bend the elbows, and yet the wand must come to the perpendicular on either side.

No. 9. Hold the wand directly in front and perpendicular, with the hands in the middle of it six inches apart, and the arms as nearly horizontal as possible; keeping the arms stiff, whirl the wand from side to side as far as you can.

No. 10. Standing erect, heels together, put the wand out with your right hand midway between two lines, one of which runs directly forward, and the other at right angles with this, at your side; which direction we shall call *diagonally forward.* Let the wand rest on the floor, at a point as far removed from your feet as possible, keeping your body and the wand perpen-

dicular, and the arm horizontal. The elbow must not be bent. Step out as seen in *Fig.* 6, the foot passing behind the wand, as seen in the figure. In doing this you must not bend the elbow, nor must you move the wand. It will be seen that the shoulders scarcely move, the motion being confined to the legs and lower part of the body. Charge thus ten times.

No. 11. Same as the last, but with the left hand and foot.

No. 12. Stand erect. Carry the wand out with the left hand diagonally forward, as far as you can reach. Step out to the wand

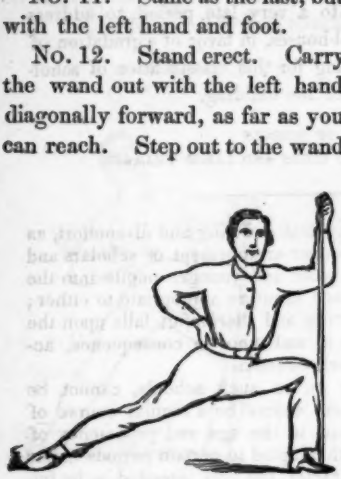


Figure 7.

Figure 8.

Figure 9.

with the left foot. Let the foot remain there. Now the body is to rise and fall as far as possible. (*Fig.* 7.) Don't bend the knee of the right leg. Keep the shoulders and head well back.

No. 13. Same as the last, on the right side.

No. 14. Stand as seen in *Fig.* 8. Thrust the arms straight forward, and back again to the chest, ten times, keeping the wand all the time perpendicular.

No. 15. At the conclusion of the last exercise, when the arms are thrust forward, bring the wand into the position seen in *Fig.* 9. Then carry it right back to the position in front, with the arms straight and horizontal. Now bring it down on the left side, and so continue ten times to each side.

(*Wand Exercises to be continued.*)

XII. SCHOOL ARCHITECTURE.

Plans of School-Houses for Two or more Schools.

We introduce a series of plans, which will present the growth of a great department of educational organization, instruction and discipline, by reproducing the arguments which we found it necessary twenty-five years ago, and down to a very late period, to address communities about to erect school-houses, in favor of a gradation of schools, and, therefore, of providing for this classification of scholars in the erection and furniture of the building.

GRADATION OF SCHOOLS
WITH SPECIAL REFERENCE TO CITIES AND LARGE VILLAGES.

There is a large amount of physical suffering and discomfort, as well as great hinderances in the proper arrangement of scholars and classes, caused by crowding the older and younger pupils into the same school-room, without seats and furniture appropriate to either; and the greatest amount of suffering and discomfort falls upon the young, who are least able to bear it, and who, in consequence, acquire a distaste to study and the school-room.

The work of education going on in such schools, cannot be appropriate and progressive. There cannot be a regular course of discipline and instruction, adapted to the age and proficiency of pupils—a series of processes, each adapted to certain periods in the development of the mind and character, the first intended to be followed by a second, and the second by a third,—the latter always depending on the earlier, and all intended to be conducted on the same general principles, and by methods varying with the work to be done, and the progress already made.

With the older and younger pupils in the same room, there cannot be a system of discipline which shall be equally well adapted to both classes. If it secures the cheerful obedience and subordination of the older, it will press with unwise severity upon the younger pupils. If it be adapted to the physical wants, and peculiar temperaments of the young, it will endanger the good order and habits of study of the more advanced pupils, by the frequent change of posture and position, and other indulgences which it permits and requires of the former.

With studies ranging from the alphabet and the simplest rudiments of knowledge, to the higher branches of an English education, a variety of methods of instruction and illustration are called for, which are seldom found together, or in an equal degree, in the same

teacher, and which can never be pursued with equal success in the same school-room. The elementary principles of knowledge, to be made intelligible and interesting to the young, must be presented by a large use of the oral and simultaneous methods. The higher branches, especially all mathematical subjects, require patient application and habits of abstraction, on the part of the older pupils, which can with difficulty, if at all, be attained by many pupils, amid a multiplicity of distracting exercises, movements and sounds. The recitations of this class of pupils, to be profitable and satisfactory, must be conducted in a manner which requires time, discussion and explanation, and the undivided attention both of pupils and teachers.

From the number of class and individual recitations, to be attended to during each half day, these exercises are brief, hurried, and of little practical value. They consist, for the most part, of senseless repetitions of the words of a book. Instead of being the time and place where the real business of teaching is done, where the ploughshare of interrogation is driven down into the acquirements of each pupil, and his ability to comprehend clearly, remember accurately, discriminate wisely, and reason closely, is cultivated and tested,—where the difficult principles of each lesson are developed and illustrated, and additional information imparted, and the mind of the teacher brought in direct contact with the mind of each pupil, to arouse, interest, and direct its opening powers—instead of all this and more, the brief period passed in recitation, consists, on the part of the teacher, of hearing each individual and class in regular order, and quick succession, repeat words from a book; and on the part of the pupils, of *saying their lessons*, as the operation is significantly described by most teachers, when they summon the class to the stand. In the mean time the order of the school must be maintained, and the general business must be going forward. Little children without any authorized employment for their eyes and hands, and ever active curiosity, must be made to sit still, while every muscle is aching from suppressed activity; pens must be mended, copies set, arithmetical difficulties solved, excuses for tardiness or absence received, questions answered, whisperings allowed or suppressed, and more or less of extempore discipline administered. Were it not a most ruinous waste of precious time,—did it not involve the deadening, crushing, distorting, dwarfing of immortal faculties and noble sensibilities,—were it not an utter perversion of the noble objects for which schools are instituted, it would be difficult to conceive of a more diverting farce than an ordinary session of a large public school, whose chaotic and discordant elements have not been reduced to system by a proper classification. The teacher, at least the conscientious teacher, thinks it any thing but a farce to him. Compelled to hurry from one study to another, the most diverse,—from one class to another, requiring a knowledge of methods altogether distinct,—from one recitation to another, equally brief and unsatisfactory, one requiring a liveliness of manner, which he does not feel and cannot assume, and the other closeness of attention and abstrac-

tion of thought, which he cannot give amid the multiplicity and variety of cares,—from one case of discipline to another, pressing on him at the same time,—he goes through the same circuit day after day, with a dizzy brain and aching heart, and brings his school to a close with a feeling, that with all his diligence and fidelity, he has accomplished but little good.

But great as are the evils of a want of proper classification of schools, arising from the causes already specified, these evils are aggravated by the almost universal practice of employing one teacher in summer, and another in winter, and different teachers each successive summer and winter. Whatever progress one teacher may make in bringing order out of the chaotic elements of a large public school, is arrested by the termination of his school term. His experience is not available to his successor, who does not come into the school until after an interval of weeks or months, and in the mean time the former teacher has left the town or state. The new teacher is a stranger to the children and their parents, is unacquainted with the system pursued by his predecessor, and has himself but little or no experience in the business; in consequence, chaos comes back again, and the confusion is still worse confounded by the introduction of new books, for every teacher prefers to teach from the books in which he studied, or which he has been accustomed to teach, and many teachers cannot teach profitably from any other. Weeks are thus passed, in which the school is going through the process of organization, and the pupils are becoming accustomed to the methods and requirements of a new teacher—some of them are put back, or made to retrace their studies in new books, while others are pushed forward into studies for which they are not prepared; and at the end of three or four months, the school relapses into chaos. There is constant change, but no progress.

This want of system, and this succession of new teachers, goes on from term to term, and year to year—a process which would involve any other interest in speedy and utter ruin, where there was not provision made for fresh material to be experimented upon, and counteracting influences at work to restore, or at least obviate the injury done. What other business of society could escape utter wreck, if conducted with such want of system,—with such constant disregard of the fundamental principle of the division of labor, and with a succession of new agents every three months, none of them trained to the details of the business, each new agent acting without any knowledge of the plan of his predecessor, or any well settled plan of his own! The public school is not an anomaly, an exception, among the great interests of society. Its success or failure depends on the existence or absence of certain conditions; and if complete failure does not follow the utter neglect of these conditions, it is because every term brings into the schools a fresh supply of children to be experimented upon, and sweeps away others beyond the reach of bad school instruction and discipline; and because the minds of some of these children are, for a portion of each day, left

to the action of their own inherent forces, and the more kindly influences of nature, the family and society.

Among these conditions of success in the operation of a system of public schools, is such a classification of the scholars as shall bring a larger number of similar age and attainments, at all times, and in every stage of their advancement, under teachers of the right qualifications, and shall enable these teachers to act upon numbers at once, for years in succession, and carry them all forward effectually together, in a regular course of instruction.

The great principle to be regarded in the classification, either of the schools of a town or district, or of scholars in the same school, is equality of attainments, which will generally include those of the same age. Those who have gone over substantially the same ground, or reached, or nearly reached the same point of attainment in several studies, should be put together, and constitute, whenever their numbers will authorize it, one school. These again should be arranged in different classes, for it is seldom practicable, even if it were ever desirable, to have but one class in every study in the same grade of school. Even in very large districts, where the scholars are promoted from a school of a lower grade to one of a higher, after being found qualified in certain studies, it is seldom that any considerable number will have reached a common standard of scholarship in all their studies. The same pupil will have made very different progress in different branches. He will stand higher in one and lower in another. By arranging scholars of the same general division in different classes, no pupil need be detained by companions who have made, or can make less progress, or be hurried over lessons and subjects in a superficial manner, to accommodate the more rapid advancement of others. Although equality of attainment should be regarded as the general principle, some regard should be paid to age, and other circumstances. A large boy of sixteen, from the deficiency of his early education, which may be his misfortune and not his fault, ought not to be put into a school or class of little children, although their attainments may be in advance of his. This step would mortify and discourage him. In such extreme cases, that arrangement will be best which will give the individual the greatest chance of improvement, with the least discomfort to himself, and hindrance to others. Great disparity of age in the same class, or the same school, is unfavorable to uniform and efficient discipline, and the adaptation of methods of teaching, and of motives to application and obedience. Some regard, too, should be had to the preferences of individuals, especially among the older pupils, and their probable destination in life. The mind comes into the requisitions of study more readily, and works with higher results, when led onward by the heart; and the utility of any branch of study, its relations to future success in life, once clearly apprehended, becomes a powerful motive to effort.

Each class in a school should be as large as is consistent with thoroughness and minuteness of individual examination, and practi-

cable, without bringing together individuals of diverse capacity, knowledge, and habits of study. A good teacher can teach a class of forty with as much ease as a class of ten, and with far more profit to each individual, than if the same amount of time was divided up among four classes, each containing one-fourth of the whole number. When the class is large, there is a spirit, a glow, a struggle which can never be infused or called forth in a small class. Whatever time is spent upon a few, which could have been as profitably spent on a larger number, is a loss of power and time to the extent of the number who were not thus benefited. The recitations of a large class must be more varied, both as to order and methods, so as to reach those whose attention would wander if not under the pressure of constant excitement, or might become slothful from inaction or a sense of security. Some studies will admit of a larger number in a class than others.

The number of classes for recitation in the same apartment, by one teacher, should be small. This will facilitate the proper division of labor in instruction, and allow more time for each class. The teacher intrusted with the care of but few studies, and few recitations, can have no excuse but indolence, or the want of capacity, if he does not master these branches thoroughly, and soon acquire the most skillful and varied methods of teaching them. His attention will not be distracted by a multiplicity and variety of cares, pressing upon him at the same time. This principle does not require that every school should be small, but that each teacher should have a small number of studies and classes to superintend.

In a large school, properly classified, a division of labor can be introduced in the department of government, as well as in that of instruction. By assigning the different studies to a sufficient number of assistants, in separate class-rooms, each well qualified to teach the branches assigned, the principal teacher may be selected with special reference to his ability in arranging the studies, and order of exercises of the school, in administering its discipline, in adapting moral instruction to individual scholars, and superintending the operations of each class-room, so as to secure the harmonious action and progress of every department. The talents and tact required for these and similar duties, are more rarely found than the skill and attainments required to teach successfully a particular study. When found, the influence of such a principal, possessing in a high degree, the executive talent spoken of, will be felt through every class, and by every subordinate teacher, giving tone and efficiency to the whole school.

To facilitate the introduction of these, and similar principles of classification, into the organization and arrangements of the schools of a town or district, as fast and as far as the circumstances of the population will admit, the following provisions should be engrafted into the school system of every state.

1. Every town should be clothed with all the powers requisite to establish and maintain a sufficient number of schools of different grades, at convenient locations, to accommodate all the children re-

siding within their respective limits—irrespective of any territorial division of the town into school districts.

2. Should provision be made for the creation of territorial school districts, a gradation of districts should be recognized, and every district having over sixty children of an age to attend school, should be obliged to maintain a primary school under a female teacher for the young pupils, and provide a secondary school for the older and more advanced pupils.

3. No village, or populous district, in which two or more schools of different grades for the younger and older children respectively, can be conveniently established, should be sub-divided into two or more independent districts.

4. Any two or more adjoining districts, in the same, or adjoining towns, should be authorized to establish and maintain a secondary school for the older and more advanced pupils of such districts, for the whole, or any portion of the year.

5. Any district, not having children enough to require the permanent establishment of two grades of schools, should be authorized to determine the periods of the year in which the public school shall be kept, and to determine the age and studies of the children who shall attend at any particular period of the year, and also to send the older pupils to the secondary school of an adjoining district.

The extent to which the gradation of schools can be carried, in any town or district, and the limit to which the number of classes in any school can be reduced, will depend on the compactness, number, and other circumstances of the population, in that town or district, and the number and age of the pupils, and the studies and methods of instruction in that school. A regular gradation of schools might embrace Primary, Secondary and High Schools, with Intermediate Schools, or departments, between each grade, and Supplementary Schools, to meet the wants of a class of pupils not provided for in either of the above grades.

1. Primary Schools, as a general rule, should be designed for children between the ages of three and eight years, with a further classification of the very youngest children, when their number will admit of it. These schools can be accommodated, in compact villages, in the same building with the Secondary or High School; but in most large districts, it will be necessary and desirable to locate them in different neighborhoods, to meet the peculiarities of the population, and facilitate the regular attendance of very young children, and relieve the anxiety of parents for their safety on their way to and from school. The school-room should be light, cheerful, and large enough for the evolutions of large classes—furnished with appropriate seats, furniture, apparatus and means of visible illustration, and having a retired, dry and airy play-ground, with a shelter to resort to in inclement weather, and with flower borders, shrubbery and shade trees, which they should be taught to love and respect. The play-ground is as essential as the school-room, for a Primary School, and is indeed the uncovered school-room of physical and moral educa-

tion, and the place where the manners and personal habits of children can be better trained than elsewhere. With them, the hours of play and study, of confinement and recreation, must alternate more frequently than with older pupils. To teach these schools properly,—to regulate the hours of play and study so as to give variety, vivacity, and interest to all of the exercises, without over-exciting the nervous system, or over-tasking any faculty of mind or body,—to train boys and girls to mild dispositions, graceful and respectful manners, and unquestioning obedience,—to cultivate the senses to habits of quick and accurate observation and discrimination,—to prevent the formation of artificial and sing-song tones,—to teach the use of the voice, and of simple, ready and correct language, and to begin in this way and by appropriate exercises in drawing, calculation, and lessons on the properties and classification of objects, the cultivation of the intellectual faculties,—to do all these things and more, require in the teacher a rare union of qualities, seldom found in one in a hundred of the male sex, and to be looked for with the greatest chance of success among females, "in whose own hearts, love, hope and patience, have first kept school."

The earlier we can establish, in every populous district, primary schools, under female teachers, whose hearts are made strong by deep religious principle,—who have faith in the power of Christian love steadily exerted to fashion anew the bad manners, and soften the harsh and self-willed perverseness of neglected children,—with patience to begin every morning, with but little if any perceptible advance beyond where they began the previous morning,—with prompt and kind sympathies, and ready skill in music, drawing, and oral methods, the better it will be for the cause of education, and for every other good cause.

2. Secondary Schools should receive scholars at the age of eight years, or about that age, and carry them forward in those branches of instruction which lie at the foundation of all useful attainments in knowledge, and are indispensable to the proper exercise and development of all the faculties of the mind, and to the formation of good intellectual tastes and habits of application. If the primary schools have done their work properly, in forming habits of attention, and teaching practically the first uses of language,—in giving clear ideas of the elementary principles of arithmetic, geography, and the simplest lessons in drawing, the scholars of a well conducted secondary school, who will attend regularly for eight or ten months in the year, until they are twelve years of age, can acquire as thorough knowledge of reading, arithmetic, penmanship, drawing, geography, history, and the use of the language in composition and speech, as is ever given in common or public schools, as ordinarily conducted, to children at the age of sixteen. For this class of schools, well qualified female teachers, with good health, self-command, and firmness, are as well fitted as male teachers. But if the school is large, both a male and female teacher should be employed, as the influence of both are needed in the training of the moral character and manners.

Schools of this grade should be furnished with class-rooms for recitations, and if large, with a female assistant for every thirty pupils.

3. High Schools should receive pupils from schools of the grade below, and carry them forward in a more comprehensive course of instruction, embracing a continuation of their former studies, and especially of the English language, and drawing, and a knowledge of algebra, geometry and trigonometry, with their applications, the elements of mechanics and natural philosophy and chemistry, natural history, including natural theology, mental and moral science, political economy, physiology, and the constitution of the United States. These and other studies should form the course of instruction, modified according to the sex, age, and advancement, and to some extent, future destination of the pupils, and the standard fixed by the intelligence and intellectual wants of the district—a course which should give to every young man a thorough English education, preparatory to the pursuits of agriculture, commerce, trade, manufactures, and the mechanical arts, and if desired, for college; and to every young woman, a well disciplined mind, high moral aims, and practical views of her own duties, and those resources of health, thought, manners and conversation, which bless alike the highest and lowest stations in life. All which is now done in private schools of the highest grade, and where the wants of any considerable portion of the community create such private schools, should be provided for in the system of public schools, so that the same advantages, without being abridged or denied to the children of the rich and the educated, should be open at the same time to worthy and talented children of the poorest parent. In some districts a part of the studies of this grade of schools might be embraced in the Secondary Schools, which would thus take the place of the High School; in others, the High School could be open for only portions of the year; and in others, two departments, or two schools, one for either sex, would be required. However constituted, whether as one department, or two, as a distinct school, or as part of a secondary school, or an ordinary district school, and for the whole year, or part of the year, something of the kind is required to meet the wants of the whole community, and relieve the public schools from impotency. Unless it can be engrafted upon the public school system, or rather unless it can grow up and out of the system, as a provision made for the educational wants of the whole community, then the system will never gather about it the warmth and sustaining confidence and patronage of all classes, and especially of those who know best the value of a good education, and are willing to spend time and money to secure it for their own children.

4. Intermediate Schools or departments will be needed in large districts, to receive a class of pupils who are too old to be continued, without wounding their self-esteem, in the school below, or interfering with its methods of discipline and instruction, and are not prepared in attainments, and habits of study, or from irregular attendance, to be arranged in the regular classes of the school above.

Connected with this class of schools there might be opened a

school or department for those who cannot attend school regularly, or for only a short period of the year, or who may wish to attend exclusively to a few studies. There is no place for this class of scholars, in a regularly constituted, permanent school, in a large village.

5. Supplementary Schools, and means of various kinds should be provided in every system of public instruction, for cities and large villages, to supply deficiencies in the education of individuals whose school attendance has been prematurely abridged, or from any cause interfered with, and to carry forward as far and as long as practicable into after life, the training and attainments commenced in childhood.

Evening Schools should be opened for apprentices, clerks, and other young persons, who have been hurried into active employment without a suitable elementary education. In these schools, those who have completed the ordinary course of school instruction, could devote themselves to such studies as are directly connected with their several trades or pursuits, while those whose early education was entirely neglected, can supply, to some extent, such deficiencies. It is not beyond the legitimate scope of a system of public instruction, to provide for the education of adults, who, from any cause, in early life were deprived of advantages of school instruction.

Libraries, and courses of familiar lectures, with practical illustrations, collections in natural history, and the natural sciences, a system of scientific exchanges between schools of the same, and of different towns,—these and other means of extending and improving the ordinary instruction of the school-room and of early life, ought to be provided, not only by individual enterprise and liberality, but by the public, and the authorities entrusted with the care and advancement of popular education.

One or more of that class of educational institutions known as "Reform Schools," "Schools of Industry," or "Schools for Juvenile Offenders," should receive such children, as defying the restraining influence of parental authority, and the discipline and regulations of the public schools, or such as are abandoned by orphanage, or, worse than orphanage, by parental neglect or example, to idle, vicious and pilfering habits, are found hanging about places of public resort, polluting the atmosphere by their profane and vulgar speech, alluring, to their own bad practices, children of the same, and other conditions of life, and originating or participating in every street brawl and low-bred riot. Such children cannot be safely gathered into the public schools; and if they are, their vagrant habits are chafed by the restraints of school discipline. They soon become irregular, play truant, are punished and expelled, and from that time their course is almost uniformly downward, until on earth there is no lower point to reach.

Accustomed, as many such children have been from infancy, to sights and sounds of open and abandoned profligacy, trained to an utter want of self-respect, and the decencies and proprieties of life, as exhibited in dress, person, manners and language, strangers to those motives of self-improvement which spring from a sense of so-

cial, moral and religious obligation, their regeneration involves the harmonious co-operation of earnest philanthropy, missionary enterprise, and sanctified wisdom. The districts of all our large cities where this class of children are found, are the appropriate field of home missions, of unobtrusive personal effort and charity, and of systematized plans of local benevolence, embracing friendly intercourse with parents, an affectionate interest in the young, the gathering of the latter into week-day, infant, and primary schools, and schools where the use of the needle, and other forms of labor appropriate to the sex and age of the pupils can be given, the gathering of both old and young into Sabbath schools and worshipping assemblies, the circulation of books and tracts, of other than a strictly religious character, the encouragement of cheap, innocent and humanizing games, sports and festivities, the obtaining employment for adults who may need it, and procuring situations as apprentices, clerks, &c., for such young persons as may be qualified by age, capacity and character. By individual efforts and the combined efforts of many, working in these and other ways, from year to year, these moral jungles can be broken up,—these infected districts can be purified,—these waste places of society can be reclaimed, and many abodes of penury, ignorance and vice can be converted by education, economy and industry, into homes of comfort, peace and joy.

[The foregoing considerations respecting the disadvantages and evils of gathering children of differing ages and attainments in the same school-room, the principles of classification to be regarded in establishing a gradation of schools, and the supplementary agencies of christian charity which should be *aided* out of the public means, as part of the system of popular education, in every large city and crowded neighborhood—were first embodied by the author in 1838 as a part of an Address, which he was called on to deliver in discharge of his duties as Secretary of the Board of Commissioners of Common Schools in Connecticut, in the principal cities and villages of that State. It has been printed in various educational documents prepared by him since, in the discharge of official duties, and repeated substantially in over fifty cities in different parts of the country, where the establishment of a system of public schools was under discussion. It is introduced into the Journal, because the general views herein presented, are still applicable to a large number of cities and villages.]

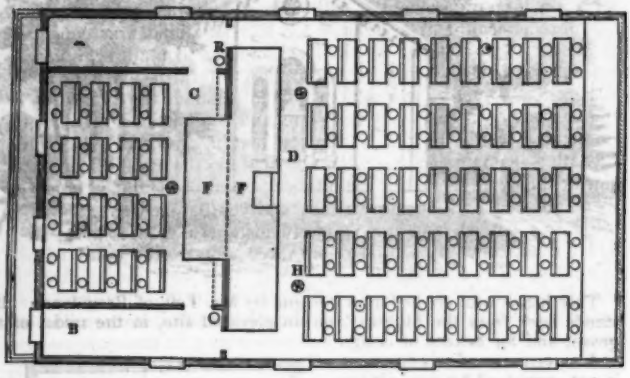
Plans of School-houses recently Erected.

Under this head will be found plans and descriptions of a few of the best school-houses, which have been recently erected in Connecticut and Rhode Island, for schools of different grades, from designs or directions furnished by the author of this treatise. They are not presented as faultless specimens of school architecture, but as embracing, each, some points of excellence, either in style, construction, or arrangement. Although the author, particularly as Commissioner of Public Schools for Rhode Island, was consulted in almost every instance by the local building committee, and was always gratified in having opportunities to furnish plans, or make suggestions,—yet he was seldom able to persuade the committee or the carpenters to carry out his plans and suggestions thoroughly. Something would be taken from the height, or the length, or the breadth;—some objections would be made to the style of the exterior or the arrangement of the interior;—and particularly the plans recommended for securing warmth and ventilation were almost invariably modified, and are in many instances entirely neglected. He desires, therefore, not to be held responsible for the details of any one house as it now stands,—for, being thus held responsible, he should probably receive credit for improvements which others are as much entitled to as himself, and should in more instances be held accountable for errors of taste, and deficiencies in internal arrangements, against which he protested with those having charge of the construction. He wishes the reader to bring all the plans published in this volume, no matter by whom recommended, or where erected, to the test of the principles set forth on page 523 vol. IX. If in any particular they fall short of the standard therein established, so far they differ from the designs which the author desires to see followed in houses erected under his own eye. But, with some reservation, most of the school-houses recently erected in Rhode Island, (and the same may be said of the new houses in Hartford, described in this volume,) can be pointed to as embracing many improvements in school architecture. Although the last state in New England to enter on the work of establishing a system of common schools, it is believed, she has now a system in operation not inferior in efficiency to any of her sister states. Be that as it may, Rhode Island can now boast of more good school-houses, and fewer poor ones, in proportion to the whole number, than any other State—more than one hundred and fifty thousand dollars having been voluntarily voted for this purpose in less than three years, by school districts, not including the city of Providence.

To Thomas A. Tefft, Esq., Architect, of Providence, much credit is due for the taste which he has displayed in the designs furnished by him, and for the elevations which he drew for plans furnished or suggested by the Commissioner. He should, not, however, be held responsible for the alterations made in his plans by the committees and carpenters having charge of the erection of the building. With all their imperfections of execution, Mr. Tefft's plans are among the best specimens of School Architecture.

Plan of School-House at Washington Village in Coventry, R. I.

The following cut presents the ground plan of the new school-house in the village of Washington, in the town of Coventry, R. I. The location is on the high ground in the rear of the village, and commands an extensive prospect in every direction. The site and yard, occupying one acre, was given to the district by Governor Whipple. The whole structure, without and within, is an ornament to the village, and ranks among the best school-houses in Rhode Island.



A—Boy's entrance.
B—Girl's entrance.
C—Primary school-room.
D—Secondary, or Grammar Department.
E—Teacher's platform.
F—Desks for two, with iron end-piece.
G—Chairs supported on iron pedestal.
H—Register for hot air.
R—Flue for ventilation, within which is carried up the smoke-pipe.

The two school-rooms can be thrown into one, for any general exercise of the two schools, by sliding doors.

The two rooms are uniformly heated by a furnace in the basement.

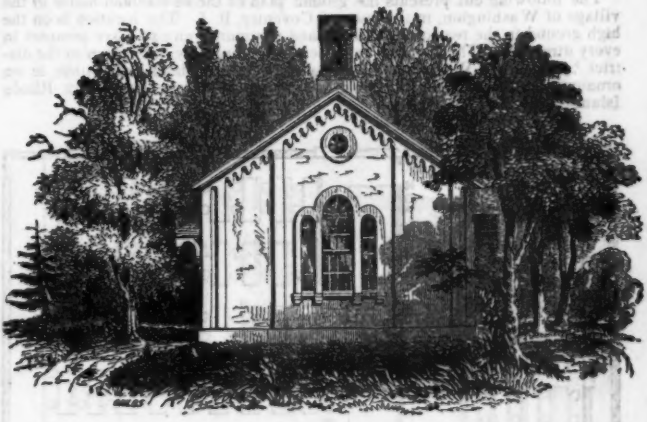
There is a well, sink, basin, mats, scrapers, bell, and all the necessary fixtures and appendages of a school-house of the first class.

The cost of the building and furniture was $2,300.

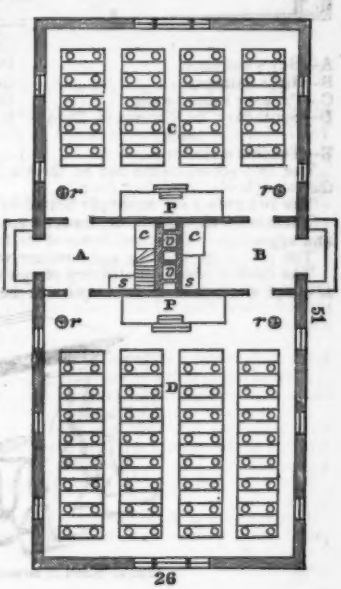
The district possesses a library of upwards of four hundred volumes, the cost of which was raised by subscription in the District.

Albany Normal School Chair and Desk.

Plan and Description of District School-House in Centremill, North Providence, R. I.



This house was erected after designs by Mr. Teft, of Providence. It stands back from the highway, on an elevated site, in the midst of a grove, and for beauty of design and convenience of arrangement, is not surpassed by any similar structure in New England. It is 26 feet by 51, and 13 feet high in the clear, with two departments on the same floor.

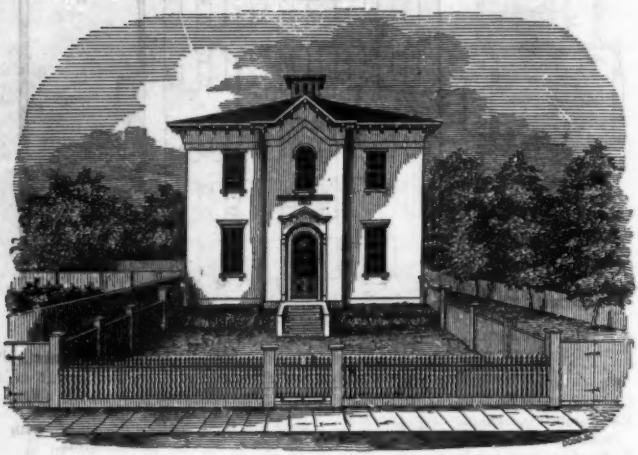


A, Boys' entry, 6 feet by 10.
B, Girls' ditto.
C, Primary department, 20 feet by 25, with desks and seats attached for 70 pupils.
D, Secondary, or Grammar department, 25 feet by 25, with desks and chairs for 64 pupils; *see p.* 120.
r, Register for hot air.
v, *v*, Flues for ventilation.
c, Closets for dinner pails of those who come from a distance
s, Sink.

The smoke pipe is carried up between the ventilating flues, and the top of the chimney is finished so as to accommodate the bell.

Public School-House in Warren, R. I.

Fig. 1.



The above cut exhibits a front view of the Public School-house erected in the village of Warren, at the expense of the town, in 1847–48, after drawings made by Mr. Teft, of Providence, under the directions of a committee of the town, who consulted with the Commissioner of Public Schools, and visited Providence, Boston, Salem, Newburyport and other places, in order to ascertain the latest improvements in school architecture, before deciding on the details of the plan.

The lot is 225 deep and 100 feet wide for a depth of 125 feet, and 161 feet wide for the remaining 64 feet. It is divided into three yards, as exhibited in the ground plan, (Fig. 2,) each substantially inclosed, and planted with trees and shrubbery.

The dimensions of the building are 62 feet by 44 on the ground. It is built of brick in the most workmanlike manner.

Most of the details of construction, and of the arrangement in the interior, are similar to those described on page 214.

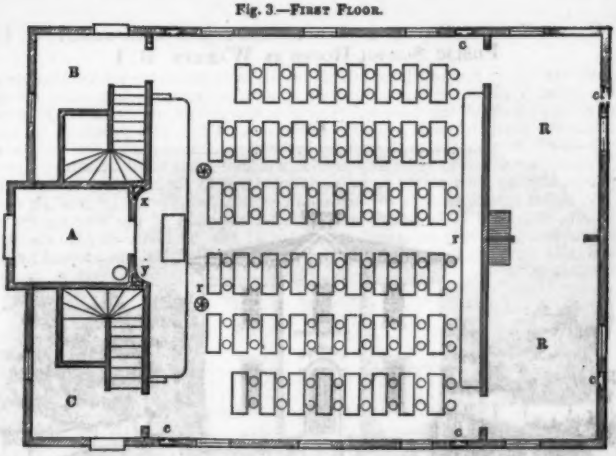
Each room is ventilated by openings controlled by registers, both at the floor and the ceiling, into four flues carried up in the wall, and by a large flue constructed of thoroughly seasoned boards, smooth on the inside, in the partition wall, (Fig. 3, x.)

The whole building is uniformly warmed by two of Culver's furnaces placed in the cellar.

Every means of cleanliness are provided, such as scrapers, mats, sink with pump, wash basin, towels, hooks for outer garments, umbrella stands, &c.

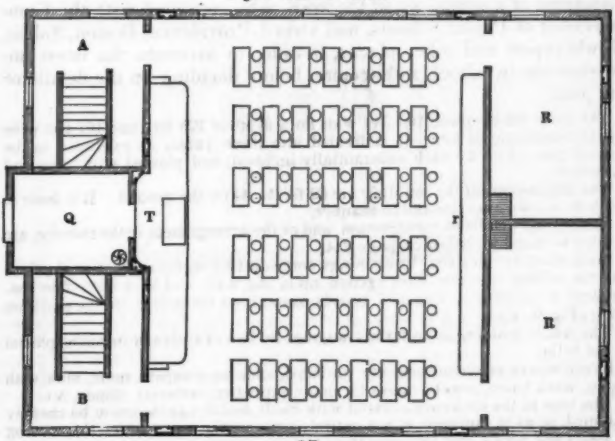
The tops of the desks are covered with cloth, and the aisles are to be cheaply carpeted, so as to diminish, if not entirely prevent, the noise which the moving of slates and books, and the passing to and fro, occasion in a school-room.

Fig. 3.—First Floor.



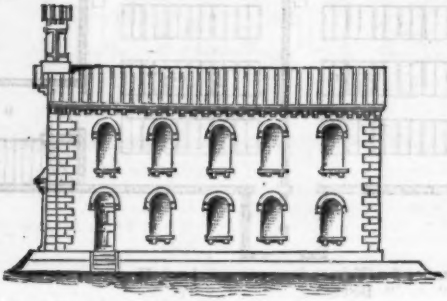
A—Front entrance.
B—Girls' entrance, with mats, scrapers, hooks for clothes, a sink, pump, basin, &c.
C—Boys' entrance do.
R—Recitation rooms, connected by sliding doors.
R, P—Platform for recitation, with a blackboard in the rear.
T—Teacher's platform.
S—Seats and desks; see page 205.
Q—Library and apparatus.
w—Windows, with inside Venetian blinds.
c—Flues for ventilation in the outer wall.
x—Flue for ventilation, lined with smooth, well seasoned boards.
y—Bell-rope, accessible to the teacher by an opening in the wall.
r—Hot air registers.

Fig. 4.—Second Floor.



Union School-House, at Woonsocket and Chepachet, R. I.

By the school law of Rhode Island, two or more adjoining school districts in the same, or adjoining towns, may, by concurrent vote, agree to unite for the purpose of maintaining a secondary or grammar school, for the older and more advanced pupils of such associating districts. Under this provision the four school districts in the town of Cumberland, which comprise the village of Woonsocket, voted to unite and provide a school-house for the more advanced pupils, leaving the younger to be accommodated in their respective districts. The Union school-house is located on a beautiful site, the donation of Edward Harris, Esq., and is built substantially after the plan of the Warren Public school-house, already described, at a cost of $7,000. The following are the front and side elevations, as originally drawn by Mr. Teft, but not adopted by the committee.

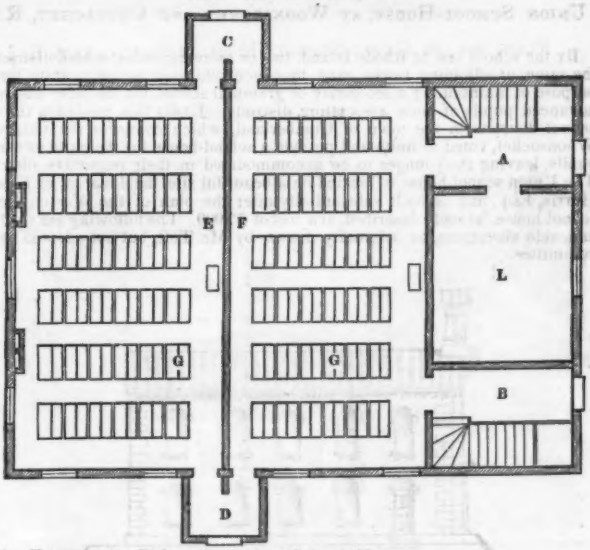


Side Elevation.

Front Elevation.

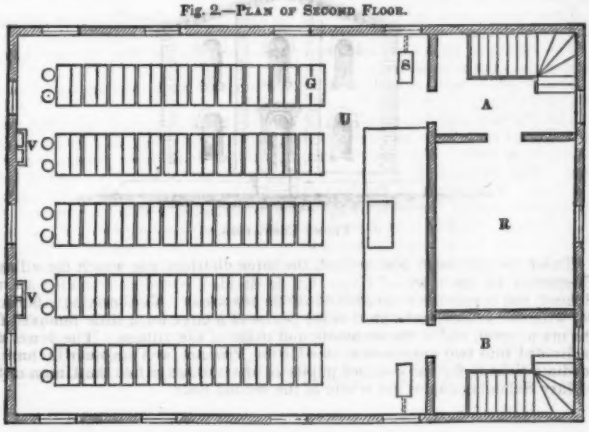
Under the provision above cited, the three districts into which the village of Chepachet, in the town of Glocester, is divided, voted to establish a Union School, and to provide a suitable house for the same. The building is 50 feet by 34, with two stories, and stands in the centre of a large lot, a little removed from the main street, and is the ornament and pride of the village. The lower floor is divided into two apartments; one for the Primary, and the other for an Intermediate School, for the younger pupils of the village, while the Union or Secondary School occupies the whole of the second floor.

Fig. 1.—Plan of First Floor.



A—Entrance for Girls to Secondary School, U.
B— " " Boys " " " "
C— " " Girls to Primary, E, and Intermediate School, F.
D— " " Boys " " " " " "
E—Primary School-room.
F—Intermediate "
U—Secondary " L—Manton Glocester Library of 900 volumes.
R—Recitation room. S—Stove. V—Flue for ventilation.
G—Seat and desk attached, for two pupils, with iron ends.

Fig. 2.—Plan of Second Floor.



Plan, &c., of Union School-House in Pawtucket, R. I

Fig. 1—Perspective.

This school-house is calculated to accommodate, on the first floor, a Primary School, (D,) with seats and desks for one hundred and sixty pupils; two Intermediate Schools, (E, E,) for sixty-four pupils each; and on the second floor a High School, (F,) for one hundred and seventy pupils.

The building is warmed and ventilated by a furnace in the cellar, from which the hot air is conveyed into the several apartments, as indicated by the registers, (r, r, r, r,) in Figs. 2 and 3, and discharged by flues carried up in the walls, as seen at v, v, v, v.

Each school-room is furnished with an appropriate place for outer garments, and with scrapers, mats and other means of neatness and cleanliness.

The boys and girls have each a separate yard in the rear, and separate entrances into the school-rooms.

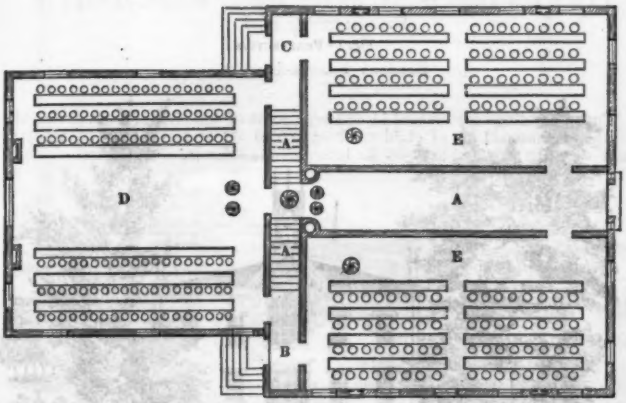
The High School is furnished with seats and desk having cast-iron end pieces similar to those described on page 282.

The Primary and Intermediate school-rooms are furnished with the patent Revolving Pivot Chair, and School-desk, manufactured by J. L. Mott, 264 Water street, New York. The seat of the chair is wood; all other parts are of cast-iron. The seat and back turn on a pivot, while the pedestal is screwed fast to the floor. The height of the lower part of the top of the desk is just equal to the highest part of the back of the chair, so as to allow it to pass under. The front edge of the seat is in a perpendicular line with the edge of the top of the desk, so that the scholar is required to sit erect when engaged in writing or studying, and the same time that part of his back which requires support is fully in contact with the chair.

Since the chairs above described were placed in this house, Mr. Mott has modified the patterns—so as to carry the back piece higher, and thus give support to the muscles above the small of the back. The iron can be covered with felt, and thus the rapid conduction of heat from the body, especially from the spinal column, in children thinly clad, and of delicate constitutions may be prevented.

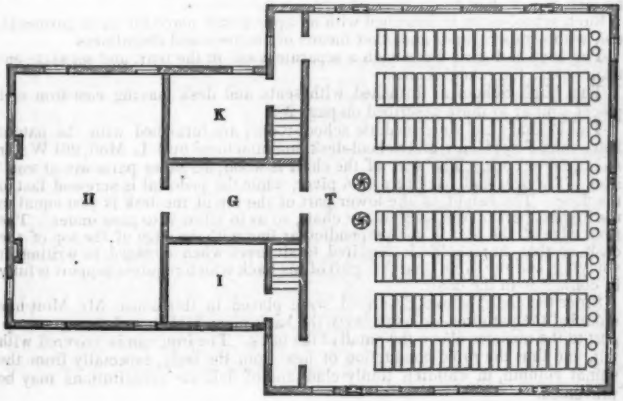
Union School-House in Pawtucket.

Fig. 2.—Plan of First Floor.



A—Entrance to High School.
B—Entrance for Boys to the Primary and Intermediate Schools.
C—Entrance for Girls to the Primary and Intermediate Schools.
D—School-room, 30 feet by 24, for Primary School.
E, E— " " 40 feet by 16, for Intermediate Schools.
F— " " 40 feet by 40, for High School.
G—Room for Apparatus, &c.
H—Recitation room to High School, 20 feet by 16.
I—K—Entrance room, one for Boys and the other for Girls, fitted up with hooks, shelves, wash-stand, &c.
T—Teacher's desk without any platform.

Fig. 3.—Plan of Second Floor—High School.



Plans and Descriptions of the Public School-Houses in Providence, R. I.

Primary School-Houses.

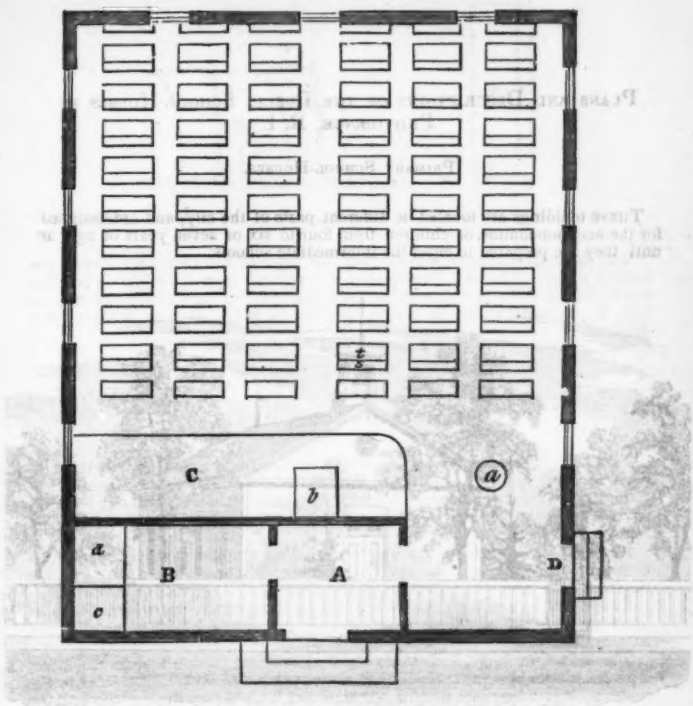
These buildings are located in different parts of the city, and are designed for the accommodation of children from four to six or seven years of age, or until they are prepared to enter the intermediate schools.

No. 1.—View of a Primary School-House.

These school-houses stand back from thirty to sixty feet from the line of the street, and near the center of lots varying from eighty to one hundred feet in breadth, and from one hundred to one hundred and twenty feet in length. Each lot is inclosed by a neat and substantial fence, six feet high, and is divided into two yards—one for boys and the other for girls—with suitable out-buildings, shade trees, and shrubbery.

These houses are each forty feet long by thirty-three feet wide, with twelve-feet posts, built of wood, in a plain, substantial manner, and, with the fences, are painted white, presenting a neat and attractive exterior.

The entrance is into a lobby [A] and thence into an open area, where stands the stove [*a*]. A portion of the lobby is appropriated to bins for charcoal [*c*] and anthracite [*d*], which is the fuel used in all the schools; the remainder [B] is occupied by a sink, and as depositories for brooms, brushes, &c. Each room is arched, thereby securing an average height of thirteen feet, with an opening in the center of the arch, two feet in diameter, for ventilation. The ventilator is controlled by a cord passing over a pulley, and descending into the room near the teacher's desk [*b*]. In each end of the attic is a circular window, which, turning on an axis, can be opened and closed by cords, in the same manner as the ventilator.



No. 2.—Interior of a Primary School-House

The teacher's platform [C] is five feet wide, twenty feet long, and seven inches high, with a black-board ten feet long and three feet wide on the wall in the rear.

The floor is of inch and a half plank, tongued and grooved; and, for the purpose of securing warmth and firmness, and avoiding noise, is laid on cement.

The windows, eleven in number, of twenty-four lights, of seven by nine glass, are hung with weights, and furnished with inside blinds. The sides of the room and entries are ceiled all round with wood as high as the window-sills, which are four feet from the floor. The rest of the walls are plastered, and covered with white hard finish. Each room is provided with sixty seats [*s*] and desks [*t*], placed in six ranges; each range containing ten seats and desks, of three different sizes, and each seat and desk accommodating two scholars, or one hundred and twenty in all.

The center aisle is three feet and a half wide, and each of the others about two feet.

The desks are over three feet long, by sixteen inches wide, with a shelf beneath for books. The upper surface of the desk [*a*], except about two inches at the top [*b*], slopes one inch and a half in a foot.

No 3.—View of Top of a Desk, and Sectional View of Primary Seats and Desks.

The front of the desk, constituting the back of the next seat, slopes one inch in a foot. The seat also inclines a very little from the edge. The seats are of four different sizes, varying from seven to ten inches wide, and from nine to fourteen inches in height, the lowest being nearest the teacher's platform.

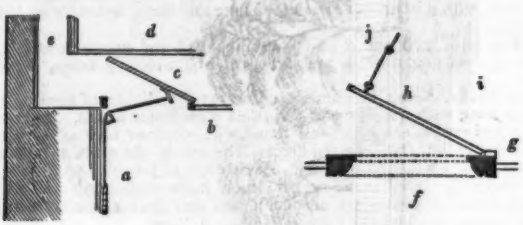
Intermediate School-Houses.

All the buildings of this class are two stories high, affording accommodations for two schools, a primary and an intermediate. These houses are generally in pleasant situations, on large lots, varying in size from one hundred feet wide by one hundred and twenty feet long, to one hundred and fifty by two hundred feet.

Rows of shade trees, consisting of elms, lindens, and maples, are planted along the side-walks and the fences inclosing the yards; and evergreens, the mountain ash, and other ornamental trees, are placed within the inclosures.

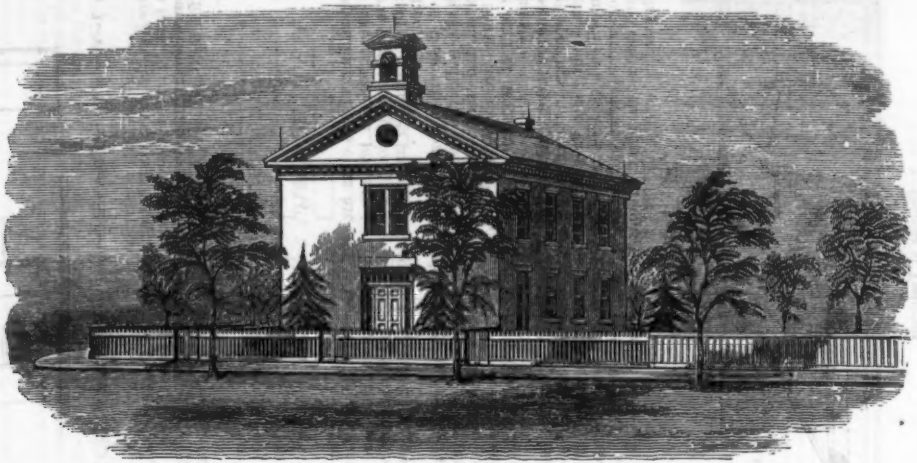
These houses are forty-four feet long, by thirty-three feet wide. Some of them are built of wood, the remainder of brick, and all in a tasteful and substantial style.

The rooms are large, and easily ventilated, being twelve feet in the clear, with large openings in the ceiling of the upper room, and on the sides in the lower room, leading into flues in the walls, which conduct the foul air into the attic, from which it escapes at circular windows in the gables of the buildings. These flues and windows can be opened and closed by cords passing over pulleys, and descending into the rooms below, where the teachers can control them with ease.



No. 5.—Sections of Ventilators.

In this cut, the cord [*i*], passing over the pulley [*j*], raising [*h*], hung on hinges at [*g*], opens wholly or partially the ventilator [*f*], a circular aperture three feet in diameter. The plan of ventilating the lower rooms is shown on

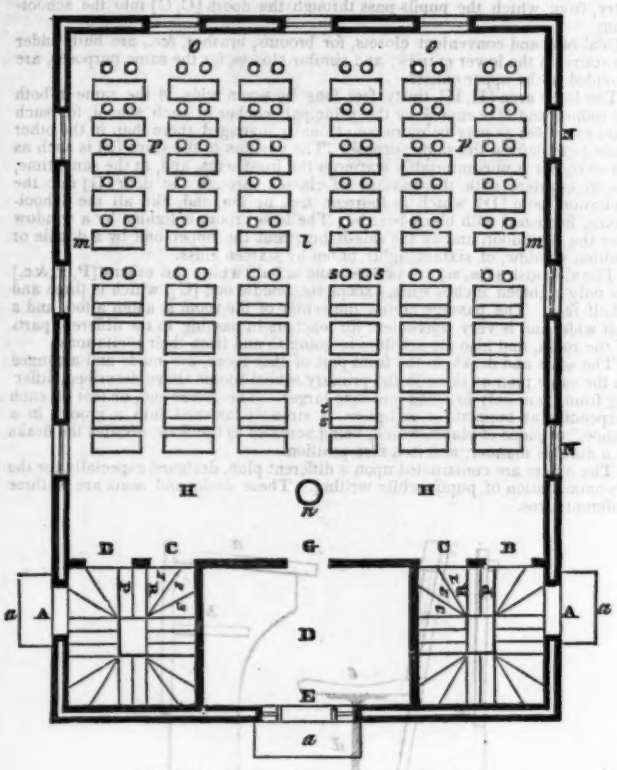


No. 4.—View of an Intermediate School-House

the other part of the diagram, in which [a] represents a cord running over a pulley, and attached to [c], a board three feet long by one foot wide, opening the space between [b], the top of the lower room, and [d], the floor of the upper, leading into the flue [e], ascending to the attic.

The windows, nine in number in each school-room, of twelve lights, of ten by sixteen glass, are hung with weights, so as to be easily opened at top and bottom, and furnished with Venetian blinds inside, to regulate the amount of light admitted.

The floors are of hard pine boards, an inch and a half thick, and about six inches wide, tongued and grooved, and laid on mortar, as a protection against fire, for the prevention of noise, and to secure warmth and firmness. All the rooms, entries, and stairways are ceiled up with matched boards about four feet, as high as the window-sills. The remaining portions of the walls are plastered, and coated with white hard finish.



No. 6.—Interior of an Intermediate School-House.

The walls of some of these buildings are solid stone-work, faced with brick; others are built with double brick walls, as above shown, connected by ties of iron or brick.

As the rooms in the lower stories of this class of buildings are appropriated to primary schools, and are furnished in the same manner as those already described, the preceding cut is intended to serve the double purpose of exhibiting on the *first* floor only the improvements on the former plan, and, on the *second*, the whole view of a room for an intermediate school.

The steps [*a*, *a*, *a*] are broad, granite blocks, with scrapers on each end. The side doors [A, A], one for boys, the other for girls, lead into entries, eight feet by ten, from which the pupils of the primary schools pass through the doors [B, B] into the main rooms, which differ from those above described, in having a space [*o*, *o*], two feet wide, on the back part of the rooms, for reading and other class exercises; and the recitation-room, [D], another valuable improvement, as it avoids the confusion arising from having two recitations in one room at the same time.

The flight of stairs in each entry, commencing at the points [R, R], and ascending in the direction of [1, 2, 3], lands on the open space [P] in the upper entry, from which the pupils pass through the doors [C, C] into the school-room.

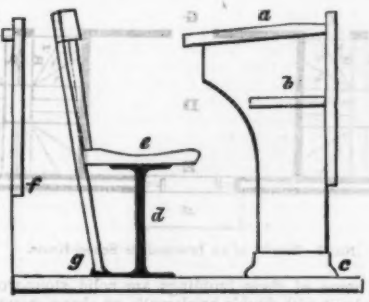
Coal-bins and convenient closets, for brooms, brushes, &c., are built under the stairs, in the lower entries; and similar closets, for the same purposes, are provided in the upper entries.

The large area [H, H], thirty feet long by seven wide, is the same in both the rooms, and is occupied by the principal teacher in each school, for such class exercises as may be more conveniently managed there than in the other place [*o*, *o*], left for the same purpose. The position of the stove [*n*] is such as not to render it uncomfortably warm on the front seats, and, at the same time, not to interfere with the passage of classes through the door [G] into the recitation-room [D], which is fourteen feet by ten, and, like all the school-rooms, furnished with black-boards. The lower room is lighted by a window over the front door, and by the side-lights; and the upper one by a double or mullion window, of sixteen lights, of ten by sixteen glass.

The side aisles [*m*, *m*] are two feet and a half wide; the others [P, P, &c.] are only eighteen inches wide, except the middle one [C], which is three and a half feet. The passage across the center of the room is about a foot and a half wide, and is very convenient for teachers in passing to the different parts of the room, and also for scholars in going to and from their recitations.

The seats and desks, in the front part of this room, are made and arranged on the same plan as those in the primary school-rooms above described, differing from them only in being one size larger. The lower end, or foot of each perpendicular support, or end-piece, is strongly fastened into a groove in a "shoe," or piece of plank, which, being screwed to the floor, secures the desks in a durable manner, and in a firm position.

The others are constructed upon a different plan, designed especially for the accommodation of pupils while writing. These desks and seats are of three different sizes.



No. 7.—Section of a Writing-Desk and Seat.

The top of the desk [*a*] is of pine, one inch and a half thick, fifteen inches wide, and three feet and a half long. These desks are twenty-seven inches high on the front, and twenty-four on the side next to the seats. A space about three inches wide, on the front edge of the top, is planed down to a level, and an inkstand is let into the center of this, even with the surface, and covered with a small lid. The ends of these desks are an inch and a half thick, and fastened by a strong tenon to the shoe [*c*], which is screwed to the floor. The front of the desk, and the shelf [*b*], for books, &c., are inch boards; the whole desk, made in the strongest manner, is painted a pleasant green, and varnished. In the next smaller size, the same proportion is observed, but all the dimensions are one inch *less*; and in the third, or smallest size, the dimensions are all one inch less than in the second. For each desk there are two chairs, resting on cast-iron supporters [*d*], an inch and a quarter in diameter, with a wide *flange* at each end; the upper one, screwed to the under side of the seat [*e*], is a little smaller than the lower, which is fastened to the floor by five strong screws, rendering the chair almost immovable. The largest size seats [*e*] in these rooms are fourteen inches in diameter and fifteen inches high, with backs, twenty-eight inches from [*g*] to the top, slanting an inch and a quarter to a foot. These backs are made with three slats, fastened by strong tenons into a top-piece, like some styles of common chairs, and screwed to the seat, while the middle one extends down into a socket on the foot of the iron standard. The seats, like the desks, are diminished one inch for the middle size, and two for the smallest, preserving the proportions in the different sizes, which adapts them to the sizes of the desks.

Grammar School-Houses.

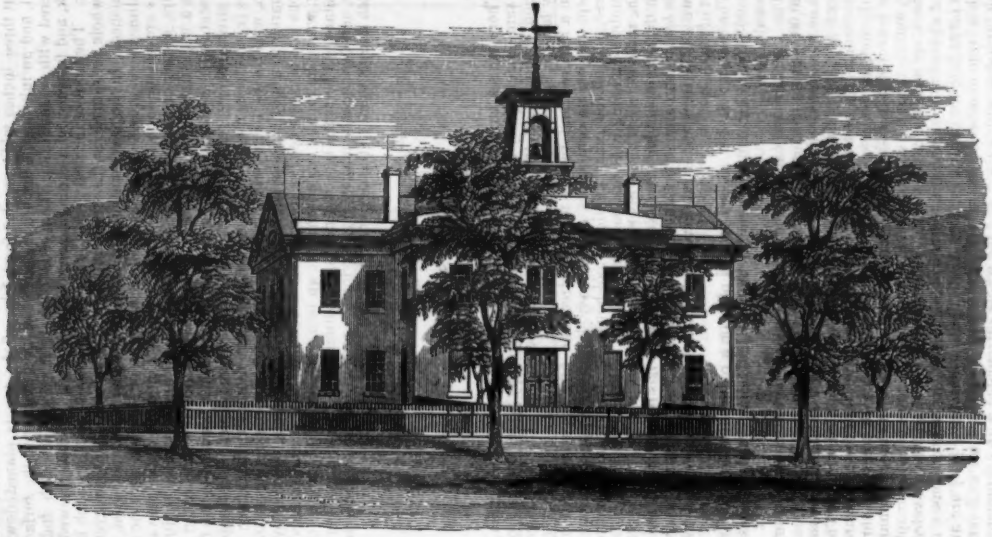
There are six buildings of this class, constructed on the same plan, and of the same size. They are seventy feet long by forty wide, with a front projection, twenty-eight feet long by fourteen feet wide. They are located on very large lots, varying from one hundred and fifty to two hundred feet long—from a hundred and twenty to a hundred and fifty feet wide. All of them, except one, are on corner lots, and all have large open spaces around them. These, and all the other public school-houses in the city, are protected with Quimby's lightning-rods, and each is furnished with a bell, which can be heard in the remotest parts of its district.

In the accompanying view, No. 9, the engraver has represented a *few* trees, a little *larger* than any at present around these buildings, because he could not crowd all the trees and shrubbery into the picture, without obscuring the lower part of the house.

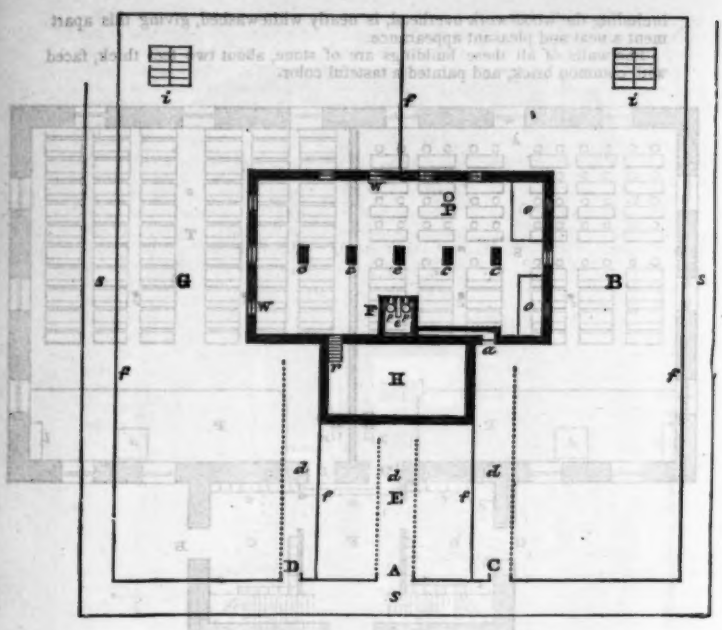
The cut on p. 91, No. 10, is a ground plan, on a reduced scale, of a Grammar School-House, including a general view of the cellar, yards, fences, gates, sidewalks, &c.

The yards around each of the grammar school-houses contain from 18,000 to 20,000 square feet, or between a third and half an acre. These grounds are inclosed, and divided into three separate yards, by substantial close board fences [*f, f, f, f*], six feet high, neatly made, and painted white. The boys' play-ground [B], and that of the girls [G], are large; but the front yard [E] is small, and, not being occupied by pupils, is planted with trees and shrubbery. The graveled sidewalks [*s, s, s*], running on two sides of all the grammar school lots, and on three of some of them, are shaded by rows of elms, maples, and lindens, set near the curb-stones. The gates [A, C, D] and the graveled walks [*d, d, d*] lead to the front and the two side doors of the school-house; and [*f*] is a large gate for carting in coal, &c. The out-buildings [*i, i*] are arranged with a large number of separate apartments on both sides, all well ventilated, each furnished with a door, and the whole surrounded with evergreens.

In the plan of the projection [H] the stairway [*r*] leads to the cellar, which is seven feet in the clear, and extends under the whole of the main building. These cellars are well lighted, having eight windows [W, W], with ten lights of seven by nine glass. The windows, being hung with hinges on the uppe



No. 2.—View of a Grammar School-House.



No.10 .—Ground Plan, &c., of a Grammar School-House.

side, and fastened with hooks and staples at the lower edge, may be opened by raising them into a horizontal position, where they are fastened with hooks as when closed. With this arrangement, it is easy to keep the cellars well ventilated at all seasons. The openings for the admission of coal into the bins [*o*, *o*], one for anthracite, and the other for charcoal, are furnished with sheet-iron shutters, fastening on the inside. Every school-house has, in the cellar, an abundant supply of good water, obtained from a fountain, or from a well, which is generally outside of the building, the water being brought in by a pump [P]. A supply of good water for a school-house should not be considered merely as a convenience, but as absolutely necessary.

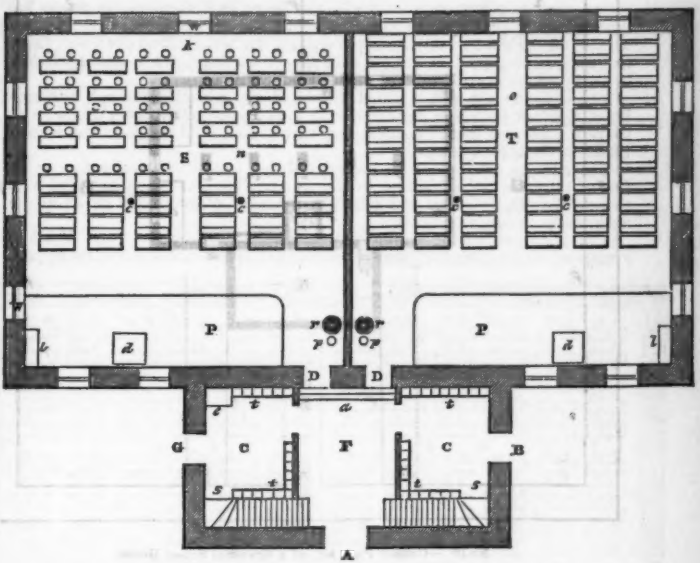
The horizontal section of a furnace [F] shows merely the ground plan. The cold air passes through [*a*] to the air-chamber, where it is warmed by the fires in [*p*, *p*], two cast-iron cylinders, fourteen inches in diameter. The evaporator [*e*] holds about fifteen gallons of water, which is kept in a state of rapid evaporation, thus supplying the air-chamber with an abundance of moisture.

In the plan and construction of the various parts of these furnaces, special pains have been taken to remove all danger of fire—an important consideration, which should never be overlooked. The furnace is covered with stone, thickly coated with mortar, and the under side of the floor above is lathed and plastered, not only above the furnace, but at least ten feet from it in every direction.

A full description of the construction and operation of the furnaces used in the public school-houses will be given under another diagram. The cellar walls and the stone piers [*c*, *c*, *c*, *c*, *c*] are well pointed, and the whole inside,

including the wood-work overhead, is neatly whitewashed, giving this apartment a neat and pleasant appearance.

The walls of all these buildings are of stone, about two feet thick, faced with common brick, and painted a tasteful color.



No. 11.—Plan of the First Floor of a Grammar School-House.

There are three entrances to these houses; the front [A], and the two side doors [B], for boys, and [G], for girls, leading into the entries [F, C, C]. The front is a large double door, with a beautiful frontice of fine hammered Quincy granite. At all the outside doors are two or three hewn granite steps, furnished with four or six scrapers at each door.

Pupils belonging to the schools in the lower story pass from the side entries into the middle one, and, ascending two steps at [*a*], enter their respective rooms [T, S], which are rather larger than those in the primary and intermediate school-houses, previously described, being thirty-six feet by thirty-two inside, and eleven feet high in the clear.

In each of the entries [C, C] there is a provision [*t, t, t, t*] for setting up umbrellas. It resembles a ladder placed in a horizontal position, and is fastened to the ceiling on one side, and supported on the other by substantial posts of oak or other strong wood, turned in a tasteful style, and set into the floor.

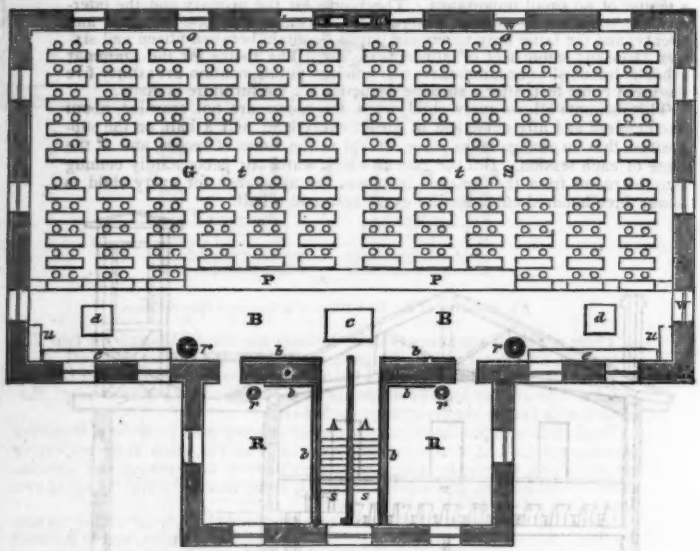
The seats and desks in the rooms [T and S] are of the same dimensions, and arranged in the same manner as those in the primary and the intermediate school-rooms before described. The small iron posts [*c, c, c, c*], about two and a half inches in diameter, supporting the floor above, are placed against the ends of the seats, so close as not to obstruct the passages at all. Besides the platforms [P, P], twenty feet by six—the tables, three feet by four, for the teachers, and the closets [*l, l*], for brushes, &c., there are black-boards, painted upon the walls, extending from the doors [D, D] to the windows, fourteen feet long by four wide, with the lines of a stave painted on one end, to aid in giving instruction in vocal music.

The plan of ventilating these rooms on the first floor is represented by cut No. 5, page 85. Every room is provided with two ventilators, each three feet long by about twelve inches wide, opening into flues of the same dimensions, leading into the attic, from which the impure air escapes at circular windows in the gables. These flues should have extended down to the bottom of the rooms, with openings on a level with the floors, so that, when the rooms are warmed with air from the furnaces above the temperature of the human breath, they might be ventilated by removing the foul air from the lower parts, and thus causing fresh, warm air to be slowly settling down upon the scholars —a very pleasant and healthful mode of ventilation.

These rooms are well warmed by heated air, admitted through registers [r, r], eighteen inches in diameter, from the furnace below, from which [p, p] tin pipes, fourteen inches in diameter, convey the air to the grammar school-rooms in the second story.

These rooms are large, with arched ceilings, measuring twelve feet to the foot of the arch, and seventeen to its crown. They are each provided with two ventilators, three feet and a half in diameter, placed in the crown of the arch, about twenty feet apart.

The entrances to the Grammar School-rooms are by two short flights of stairs on a side; from the lower entries to [s, s], spaces about three feet square,



No. 12.—Plan of a Grammar School-Room.

and thence to [A, A], spaces three by five feet, extending from the top of the stairs to the doors opening into the school-room.

The master's table [c], as well as tables [d, d], for the assistants, are movable. The large area [B, B], being fourteen inches above the floor of the room, is eight feet wide by sixty-four long, with large closets [u, u] at the ends, fitted up with shelves, &c., for the use of the teachers.

The school-room is warmed by heated air, admitted at the registers, [r, r] and the recitation-rooms [R, R] in the same manner, by the small registers, [r, r] all of which are connected with the furnace in the cellar by large tin pipes or conductors.

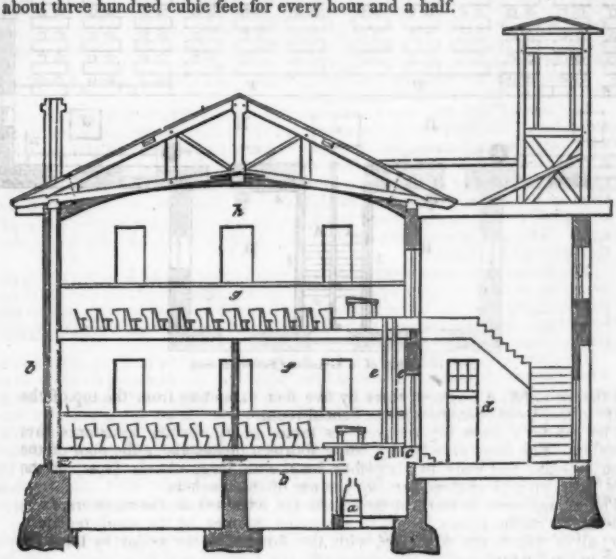
The black-boards, four feet wide, painted upon the hard-finished walls, are indicated by the lines [*b*, *b*, *b*, &c.] in the recitation-rooms, and along the walls behind the master's table, extending on each side to the windows beyond, [*e*, *e*] making, in each Grammar School, about three hundred square feet of black-board.

The long benches [*e*, *e*] are used for seating *temporarily* new pupils on their entering school, until the master can assign them regular seats; also for seating visitors at the quarterly examinations. The space [P, P], a broad step, eighteen feet long and two feet wide, is used for some class exercises on the black-boards. The passage [*t*, *t*], about eighteen inches wide, running the whole length of the room, affords great facility in the movements of pupils to and from the recitations and other class exercises. The master's classes generally recite in the space [*o*, *o*] on the back side of the room, four feet wide and sixty-four feet long, where seats are placed for scholars to sit during recitation, when it is necessary; and the same accommodations are provided in the recitation-rooms.

The windows [W, W, &c.], which are hung with weights, and furnished with inside blinds, in the manner before described, contain twelve lights each, of ten by sixteen glass, of the strongest kind, the Saranac or Redford glass.

The quantity of air furnished for each scholar in the public school-rooms is a matter of no small importance. The rooms for the primary and the intermediate schools—the former designed to accommodate one hundred and twenty, and the latter only ninety-six pupils—contain between fifteen and sixteen thousand cubic feet of atmospheric air. The rooms for the grammar schools, intended to accommodate two hundred pupils, contain over thirty-five thousand cubic feet, after a suitable deduction for the furniture is made.

This estimate allows every child, when the rooms are not crowded, about one hundred and fifty cubic feet of air for every hour and a half, on the supposition that no change takes place, except at the times of recess, and at the close of each session. But the rate at which warm air is constantly coming into the rooms from the furnaces, increases the allowance for every child to about three hundred cubic feet for every hour and a half.



No. 13.—Transverse Section of a Grammar School-House.

The preceding cut is given in order to show an *end view*, the projection, belfry, rooms, seats, desks, and cellar. An imperfect section of the warming apparatus is presented, giving an outline of the plan of its construction. The smoke-pipe, connected with [*a*], the heater, coiled twice around in the air-chamber, passes off in the direction of [*b*, *b*] to the chimney. The short tin pipes [*c*, *c*] conduct the warm air into the lower rooms; and the long ones [*e*, *e*] convey it to the rooms in the second story. On each side of the projection over the door [*d*] is a window, lighting the outside entry, and also the middle entry by another window over the inside door. The end views of seats and desks do not represent the different sizes very accurately, but sufficiently so to give a correct idea of the general plan.

The High School-House.

This building occupies an elevated and beautiful situation, at the head of President street, near the central part of the city. It is a specimen of plain, but tasteful architecture, on which the eye reposes with pleasure. The lot, somewhat irregular in its form, is equivalent to one a hundred feet by a hundred and fifteen, and lies on a gentle hill-side, rendering it easy to construct a basement almost entirely above ground, except on the back side. The extensive grounds in front, and on either side, all planted with trees, and separated from the High School only by the width of the streets, add much to the beauty and pleasantness of its situation. The yards around it are inclosed by a handsome baluster fence, resting in front on heavy blocks of rough granite. The steps are of hewn granite, twelve feet long, making a very convenient entrance.

The High School being designed for both boys and girls, an entirely separate entrance is provided for each department. The front door, at which the girls enter, has a very beautiful frontispiece, with double columns (thus providing for large side-lights), and a heavy ornamented cap, all cut from Quincy granite in the best style.

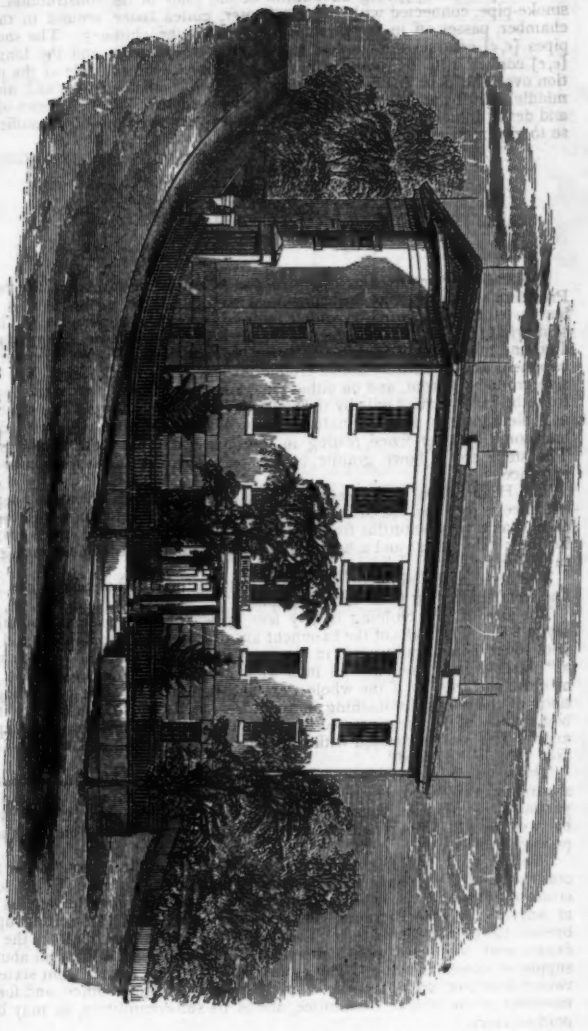
The door in the circular projection, fronting on another street, has also a fine frontispiece, cut from Quincy granite.

The size of this building is fifty feet by seventy-six, with a projection of seven feet. The walls of the basement are of stone, three feet thick, and faced with rough-hewn granite, laid in courses twenty inches wide. Each stone has a "chiseled draft, fine cut," an inch wide around the face, and all the joints as close and true as if the whole were fine hammered. The remaining portions of the walls, diminishing in thickness as they rise, are faced with the best quality of Danvers pressed brick, giving the building a beautiful appearance. The roof is covered with tin, every joint soldered, and the whole surface kept well painted.

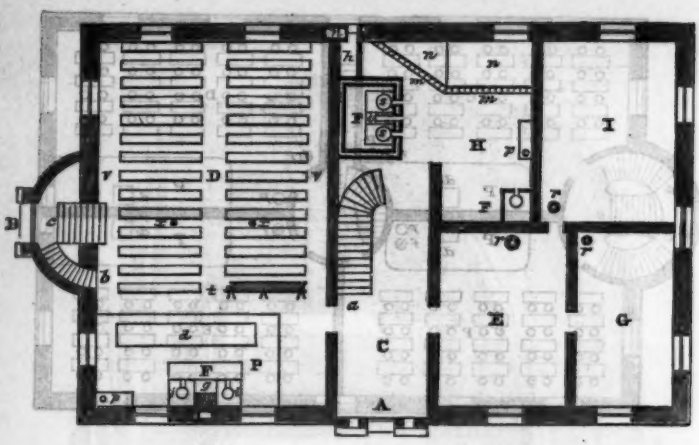
The rooms in the basement story, which is twelve feet high in the clear, are separated from each other by solid brick walls. The pupils in the girls' department, entering the house at [A], pass into the large lobby [C], twelve feet by twenty-eight, from which they can go to all parts of the building appropriated to their use.

The furnace-room [H] has a brick floor, and is kept in as good order as the other parts of the house. The coal-bins [*n*, *n*] and the furnace [F] are so constructed, that, with an ordinary degree of care, the room may be kept as clean as any of the school-rooms. The arrangements [*m*, *m*] for setting up umbrellas have been described. The pump [*p*], accessible to all in the girls' department, connected with a nice sink, lined with lead, affords an abundant supply of excellent water. The rooms [E, G, I], each not far from sixteen by twenty-four feet, are appropriated as the Superintendent's Office, and for such meetings of the School Committee, and of its sub-committees, as may be appointed there.

The large lecture-room, on the opposite side of the lobby, is furnished with settees, which will accommodate about two hundred and fifty pupils On the



No 14.—View of the High School-House



No. 15.—Plan of the Basement of High School.

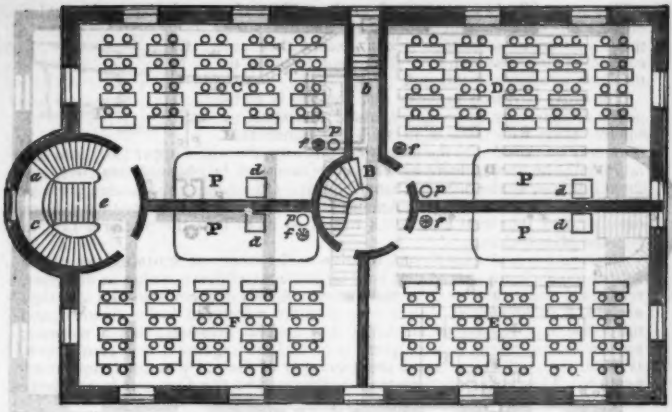
platform [P], raised seven inches from the floor, a long table or counter [*d*], made convenient for experimental lectures in Chemistry, Natural Philosophy, &c., having pneumatic cisterns for holding gasses. At [F, &c.] are suitable provisions for the fires used in the preparations of chemical experiments. The pump [*p*], with a sink like the other, is used exclusively by the pupils in the boys' department.

In all lectures, and other exercises in this room, the girls, entering at [*a*], occupy the seats on the right of [D], the middle aisle. The boys, entering by descending the short flight of stairs [*b*], are seated on the opposite side of the room. This may seem like descending to useless particulars, but it is done to show that there are no grounds for the objections sometimes made against having a school for boys and for girls in the same building, where the departments are kept entirely separate, except in exercises in vocal music and occasional lectures. The boys enter the house at the end door [B], which is six feet above the basement floor, and, by a short flight of stairs, they reach the first story at [*e*].

The three rooms [C, D, F] are appropriated to the department for girls. They are easy of access to the pupils, who, ascending the broad flight of stairs, terminating at [B], can pass readily into their respective rooms.

The course of instruction in the school occupying three years, the room [D] is appropriated to the studies for the first, [E] to those of the second, and [F] to the course for the third year. In each room there are three sizes of seats and desks, and their arrangement in all is uniform. The largest are on the back side of the room. The largest desks are four feet eight inches long, and twenty-two inches wide on the top; the middle size is two inches smaller, and the other is reduced in the same proportions. The largest seats are as high as common chairs, about seventeen inches, and the remaining sizes are reduced to correspond with the desks. The passages around the sides of the rooms vary from two to four feet wide, and those between the rows of desks, from eighteen to twenty-four inches.

On the raised platforms [P, P, P, P] are the teachers' tables [*d*, *d*, *d*, *d*], covered with dark woolen cloth, and furnished with four drawers each. The registers [*f*, *f*, *f*, *f*] admit the warm air from the furnace, and the pipes [*p*, *p*, *p*] conduct it into the rooms in the upper story. The passage [*b*] leads into the back yard, which is ornamented with a variety of shrubbery.

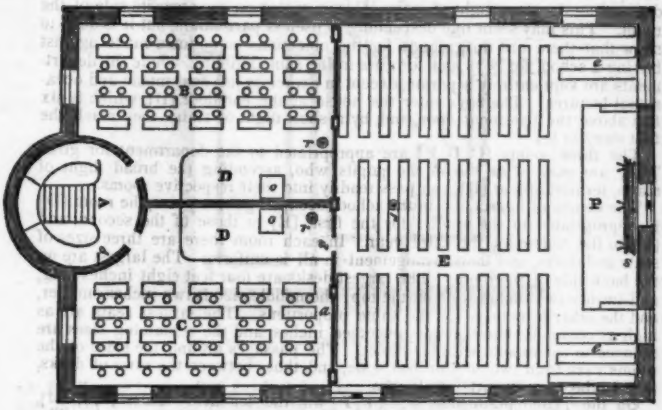


No. 16.—Plan of the First Story of the High School.

The door leading from the room [F] is used only for teachers and visitors, except when the two departments assemble in the hall.

In the room [C] the boys pursue the studies prescribed for the first year; the other rooms in this department are in the next story.

Pupils ascending from the area [e], by two circular stairways, land on the broad space [a, c], from which, by a short flight of stairs, they reach [A], in the following cut, the floor of the upper story, which is sixteen feet in the clear.



No. 17.—Plan of the Second Story of the High School-House.

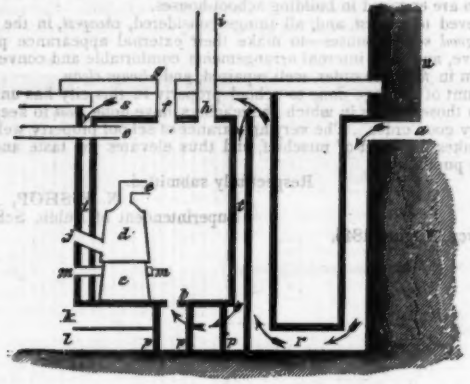
The room [B] is appropriated to the middle class, and [C] to the senior class. The arrangement of the seats and desks are the same as in the other rooms, except they are *movable*—being screwed to a frame not fastened to the floor, as shown in this cut.

The cross partition [*a*]—see cut No. 17—is composed of four very large doors, about fourteen feet square, hung with weights in such a manner that they may be raised into the attic, thus throwing the whole upper story into one large hall—an arrangement by which one room can be changed into *three*, and three into *one*, as the occasion may require. On all public occasions, such as Quarterly Examinations, and Annual Exhibitions, the rooms are thus thrown together, and the seats and desks turned so as to face the platform [P], in [E], the principal hall.

Observation and experiment, relative to the modes of warming the public school-rooms, have proved that very *large* stoves, eighteen inches in diameter, render the temperature of the rooms *more uniform and pleasant*, and that they are also *more economical*, both in regard to the amount of fuel consumed, and the amount of repairs required. It is a general principle, that a warming apparatus, containing a *large* quantity of fuel, undergoing a *slow* combustion, is better than one containing a *small* quantity of fuel, in a state of *rapid* combustion. The stoves in the small buildings, and the furnaces in the large ones, are constructed on this principle.

In regard to the construction of furnaces for warming public buildings or private dwellings, so much depends upon circumstances, that no specific plan can be given which would be successful in all cases. One familiar with the principles which regulate the motions of currents of air at different temperatures, can, with an ordinary degree of good judgment and mechanical skill, make a furnace in any place, where one can be made at all, that will accomplish all which the laws of nature will permit.

The following cut is intended to illustrate *two* plans for a furnace.



No. 18.—A Vertical Section of a Furnace

In the first, the cold air is admitted at [*a*], through the outside walls of the building, and descends in the direction described by the arrows, to [*r*], and thence rises to the top of the furnace, as shown by the arrows. At this place, the cold air diffuses itself over the whole upper surface, about eight feet by ten, and passes down between the double walls of the furnace, in the spaces [*t*, *t*], which extend all around the furnace, and rises from beneath, through a

large opening [*b*], into the air-chamber, where it is heated and conducted to the rooms by large pipes, [*f*, *h*]. The object of this mode of taking in air is two-fold. In the first place, the constant currents of cold air, passing over the top of the furnace, keep that surface comparatively cool, and also keep the floors above the furnace cool, thus removing all danger of setting fire to the wood-work over the furnace.

In the second place, as the inside walls are constantly becoming heated, and the currents of cold air, passing down on all sides of the walls, become rarified by their radiation, and thus, as it were, take the heat from the outside of the inner walls, and bring it round into the air-chamber again, at [*b*]. This is not mere theory, but has been found to work well in practice. On this plan, the outside walls are kept so cool, that very little heat is wasted by radiation.

In the second plan, the cold air is admitted as before; but, instead of ascending from [*r*] to the top of the furnace, it passes through a large opening, directly from [*r*], to [*p*, *p*, *p*], representing small piers, supporting the inside walls, and thence into the air-chamber at [*b*], and also *up* the spaces [*k*, *l*], to the top [*s*], from which the air warmed by coming up between the walls is taken into the rooms by separate registers, or is let into the sides of the pipes [*f*, *h*].

By this plan, the air passes more rapidly through the air-chamber, and enters the rooms in *larger* quantities, but at a *lower* temperature. This is the better mode, if the furnace be properly constructed with large inlets and outlets for air, so that no parts become highly heated; otherwise, the wood-work over the furnace will be in some danger of taking fire. The general defects in the construction of furnaces are:—*too small* openings for the admission of cold air—*too small* pipes for conveying the warm air in all horizontal and inclined directions—and defective dampers in the perpendicular pipes. A frequent cause of failure in warming public buildings and private dwellings may be found in the ignorance and negligence of attendants.

A single remark will close this report, which has been extended, perhaps too far by specific details—a want of which is often complained of by mechanics who are engaged in building school-houses.

It is believed to be *best*, and, all things considered, *cheapest*, in the end, to build *very good* school-houses—to make their external appearance pleasant and attractive, and their internal arrangements comfortable and convenient—to keep them in *first-rate* order, well repaired, and *always clean*.

The amount of damage done to school property in this city has uniformly been *least* in those houses in which the teachers have done *most* to keep every thing in very good order. The very appearance of school property well taken care of rebukes the spirit of mischief, and thus elevates the taste and character of the pupils.

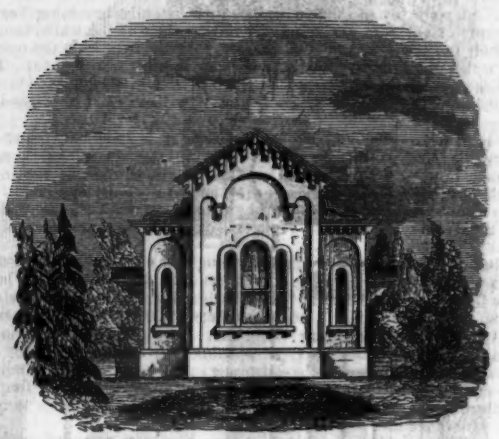
Respectfully submitted.

N. BISHOP,
Superintendent of Public Schools.

PROVIDENCE, August, 1846.

PLAN OF DISTRICT SCHOOL-HOUSE IN HARTFORD, CONN.

Fig. 1.



The above cut represents the front elevation of a new school-house erected in Arsenal District, in Hartford, after designs by Octavius Jordan, Architect. As originally planned there were to be two rooms, as shown in side elevation, (Fig. 3.) The largest (Fig. 2) room is forty-five feet long by twenty-five wide, with a recitation-room (C) fourteen feet by twelve, and two entries, one for boys (A) and one for girls, (B), each twelve feet by six, furnished with sink, nooks, &c. There are thirty-two desks, each for two pupils, with sixty-four chairs, (page 141, Fig. 2), and thirty-two chairs for young children, (Fig. 3, page 30.) The room is warmed by Mott's School Stove, (page 146,) and ventilated by flues in the walls, opening at the top and bottom of the room, which is fifteen feet high in the clear. The material is brick, and the cost $1800.

Fig. 2. GROUND PLAN.

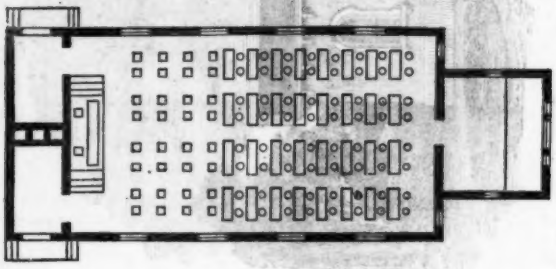


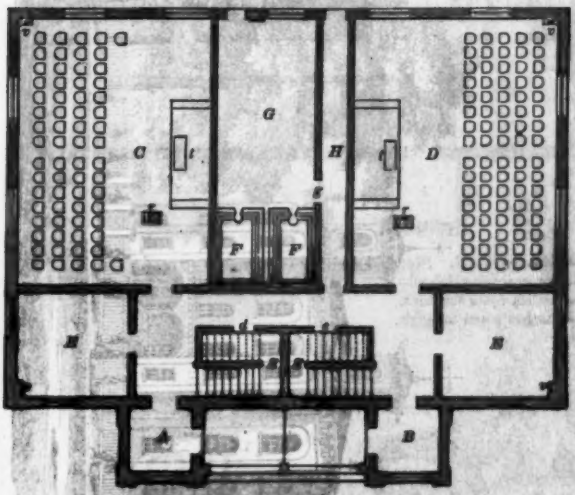
Fig. 3. Side Elevation.

Side elevation of the new School-house in Arsenal District, Hartford, as originally designed for two departments The flues for smoke and for ventilation are carried up in the belfry, which is of brick

Plans of the South District School-house in the City of Hartford.

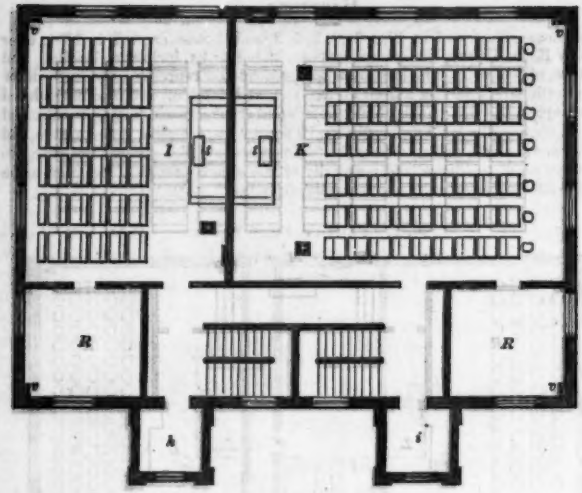
The house, illustrated in Figs. 1, 2, 3, 4, 5, and 6, was erected in 1851, after plans by E. D. Tiffany, Esq., at an expense, including lot, fixtures, building, and furniture, of $13,000. The location is well central and retired, on the east side of Wadsworth street, having a front of 220 feet, and depth of 120, and is rendered surpassingly attractive and beautiful by a number of fine old majestic oaks and graceful elms. The building is of brick, 70 feet by 58, exclusive of the towers, and is three stories high, and was designed to accommodate 450 pupils—but owing to the attraction of the house and popularity of the school, provision has been made in it for 500 pupils—classified into five departments.

Fig. 2. Plan of First Floor.



A—Girls' entrance.
B—Boys' do.
C—Primary No. 1. Seated with chairs. (Fig. 5.)
D—Primary No. 2. Seated as No. 1.
E E—Clothes rooms for Upper Department.
F F—Culver's Furnaces in basement.
G—Coal-room, extending under Primary No. 1.
H—Girls' passage to play ground.
S S—Stairs.
c—Clothes room for boys.
d—Clothes room for girls.
g—Stairs to Furnaces, &c.
t t—Teacher's table.
r—Registers for heated air.
v—Flues for ventilation surmounted by Emerson's Ejector.

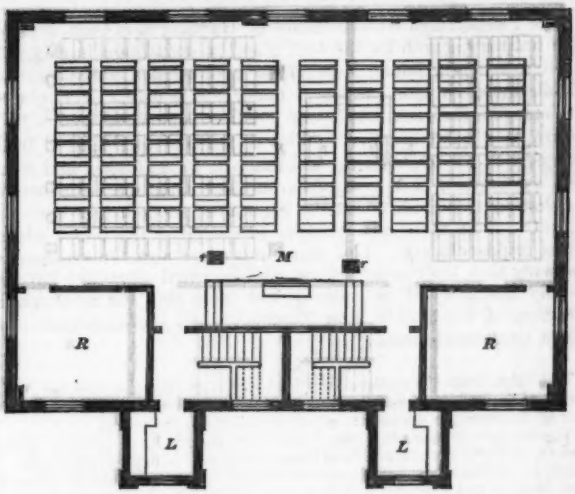
FIG. 3. PLAN OF SECOND FLOOR.



I—Primary No. 3. Seat and desk for two pupils. (Fig. 6.)
K—Intermediate School—seat and desk for one pupil.
i—Clothes room for boys.
k—Clothes room for girls.

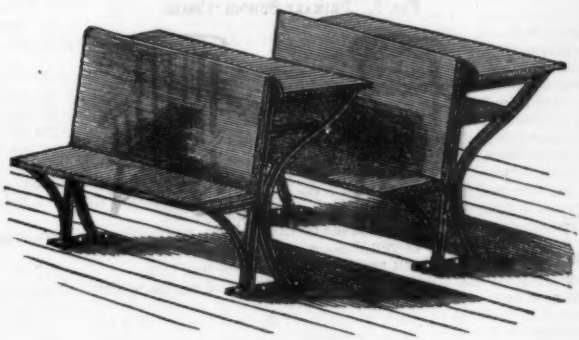
FIG. 5. PRIMARY SCHOOL CHAIR.

FIG. 4. PLAN OF THIRD FLOOR.



M—Upper Department, seats and desks for two pupils. (Fig. 6.)
L L—Library and Apparatus.

FIG. 6. HARTFORD SCHOOL DESK.



Plans and Description of the Public High School-House, Hartford, Conn.

The Public High School-House of Hartford was built after more than ordinary search for the best plan, (a committee having visited Boston, Lowell, Salem, Newburyport, Worcester, Providence, and Middletown, for this purpose,) under the constant oversight of a prudent, practical and intelligent building committee, and with due regard to a wise economy. The committee were limited in their expenditure for lot, building, and fixtures, to $12,000; and when it was ascertained that a suitable building could not be constructed for that sum, individuals on the committee immediately contributed $2,400 out of their own pockets to complete the house with the latest improvements. The committee have now the satisfaction of knowing that their contributions and personal oversight have been mainly instrumental in erecting and furnishing the most complete structure of the kind in New England, when the aggregate cost is taken into consideration.

The High School is designed for both males and females, and the arrangements of the buildings, and the grounds, are made with reference to the separation of the sexes, so far as this is desirable in the same school.

The lot on which the building stands is at the corner of Asylum and Ann streets, and is at once central, and large enough for the appropriate yards. The yards are separated by a close and substantial board fence, and the grounds are well laid out and properly inclosed; they will also soon be planted with trees and shrubbery. The building is of brick, three stories high, upon a firm stone basement. Its dimensions are 50 by 75 feet. The basement is 13 feet in the clear, six feet of which are above the level of the yard. This part of the building is occupied by furnaces, coal bins, sinks, pumps, entrance rooms, &c. At one end, and on two opposite sides of the building, a stair case eleven feet in width extends from each of the two entrance rooms, to the upper story, with spacious landings on the first and second floors. Two rooms, each 11 by 14 feet, are between the stair cases, the one on the first floor being used for a front entry to the building, and the one on the second floor being appropriated to the Library and Apparatus. Two closets, eleven by four feet on the first floor, and immediately beneath the stair cases, receive the outer garments, umbrellas, &c., of the teachers.

An aisle of four feet four inches in width extends between the desks and outer walls of the rooms, and between every two ranges of desks is an aisle of two feet four inches in width. An aisle of eight feet in width passes through the middle of the rooms, parallel to the narrower passages. A space of five feet in width is likewise reserved between the remote seats in the ranges and the partition wall of the rooms. Around the sides of the rooms, tastefully constructed settees are placed for occasional recitations, and for the accommodation of visiters, and in the upper room for the use of the pupils of the room below, during the opening and closing exercises of the school.

The pupils, when seated, face the teachers' desks and platforms, which occupy the space between the entrance doors of each room.

A blackboard, or black plaster surface, forty feet long, and five broad, extends between the doors leading to the recitation rooms, which are also lined with a continuous blackboard. There is also a blackboard extending the entire length of the teachers' platform in the lower room, and two of smaller dimensions in the room above, a part of the space being occupied by the folding doors leading to the library and apparatus room. Twenty chairs, of small dimensions and sixteen inches in height, are placed around each recitation room, thirteen inches apart and seven inches from the walls, and securely fastened to the floor. A clock, with a circular gilt frame and eighteen-inch dial plate, is

placed over the teachers' platform in each school room, in full view of the pupils. A small bell is also placed above the teachers' platform in the lower room, with a wire attached, passing to the desk of the Principal, in the room above, by which the time of recesses, change of recitation classes, &c., are signified to the members of the lower rooms.

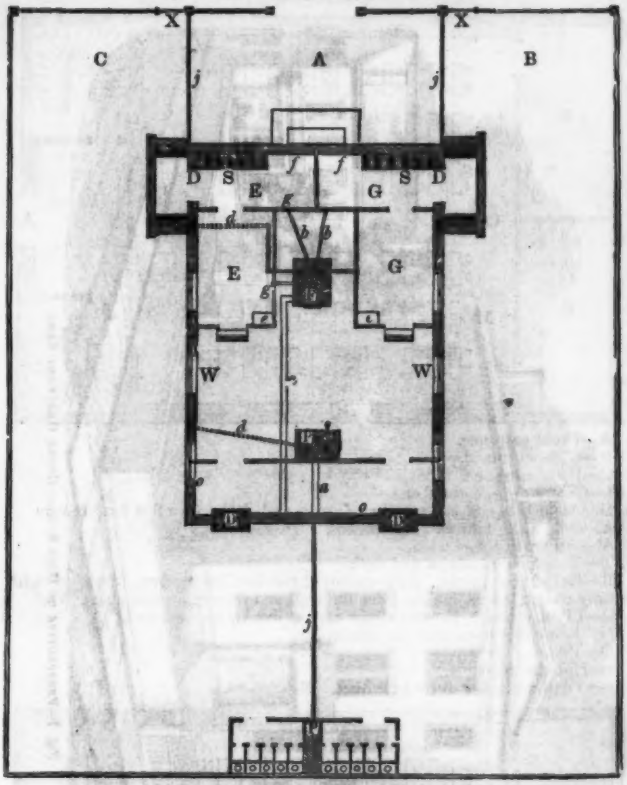
The school-rooms in the first and second stories are 50 feet square, and 13 feet in height—to each of which, two recitation rooms 12 by 23 feet are attached. The large rooms are furnished with "Kimball's improved School Chairs and Desks," placed in six ranges, extending back from the teachers' platforms, ten esks forming a range, and two chairs attached to each desk, furnishing accommodations in each room for 120 pupils—60 of either sex. Ample room yet emains in front of these ranges to increase the number of desks when the wants of the school demand them. The desks are four feet in length and one foot four inches in breadth, constructed of cherry, oiled and varnished. The moderately inclined tops are *fixed* to the end supporters, and the openings for books are in front of the pupils. Glass inkstands are inserted in the tops of the desks, and the ink protected from dust and the action of the atmosphere by mahogany covers turning on pivots. The chairs are constructed with seats of basswood, hollowed, and backs of cherry, moulded both to add beauty to the form of the chair, and to afford support and comfort to the occupants. Al are neatly stained and varnished, and they, as well as the desks, rest on iron supporters, firmly screwed to the floor.

The entire upper story is converted into a hall, being twelve feet in height at the walls, rising thence in an arch to the height of seventeen feet. This is appropriated to reading, and declamation, and for the female department of the school, to daily recess, and calisthenic exercises. A moderately raised platform is located at one end, above which an extended blackboard is placed, and settees are ranged around the walls; these, properly arranged, together with the settees from the lower rooms, which are easily transported above, speedily convert the open *Hall* into a commodious Lecture room,—and also adapt it to the purposes of public examinations and exhibitions.

In each of the two entrance rooms are placed the means of cleanliness and comfort,—a pump of the most approved construction, an ample sink, two wash basins with towels, glass drinking tumblers, and a looking-glass. Ranges of hooks for hats, coats, bonnets, cloaks, &c., extend around the rooms, and are numbered to correspond with the number of pupils, of each sex, which the capacity of the house will accommodate. In the girls' room, pairs of small iron hooks are placed directly beneath the bonnet hooks, and twelve inches from the floor, for holding the over-shoes. In the boys' room, boot-jacks are provided to facilitate the exchange of boots for slippers when they enter the building—an important article, and of which no one in this department of the school is destitute. A thin plank, moderately inclined by hollowing the upper side, is placed upon the floor, and extends around the walls of the room, to receive the boots and convey the melted ice and snow from them, by a pipe, beneath the floor. A large umbrella stand is furnished in each of the two entrance rooms, also with pipes for conveying away the water. Stools are secured to the floors for convenience in exchanging boots, shoes, &c. Directly under the stairs is an OMNIUM GATHERUM—an appropriate vessel, in which are carefully deposited shreds of paper, and whatever comes under the denomination of *litter*, subject, of course, to frequent removal. These rooms, in common with the others, are carefully warmed. The wainscoting of the entrance rooms, and the stair case, is formed of narrow boards, grooved and tongued, placed perpendicularly, and crowned with a simple moulding. The railing of the stair case is of black walnut. A paneled wainscoting reaching from the floor to the base of the windows, extends around the walls of the remaining rooms. All the wood work, including the library and apparatus cases, is neatly painted, oak-grained, and varnished. The teachers' tables are made of cherry, eight feet in length, and two feet four inches in breadth, with three drawers in each, and are supported on eight legs. A movable writing desk of the same material is placed on each. Immediately in front of the teachers' desk in the upper room, a piano is to be placed, for use during the opening and closing exercises of the school, and for the use of the young ladies during the recesses. Venetian window blinds with rolling slats, are placed inside the windows, and being of a slight buff color, they modify the light without imparting a sombre hue to the room.

Fig. 1—Perspective of High School-House Hartford Conn.

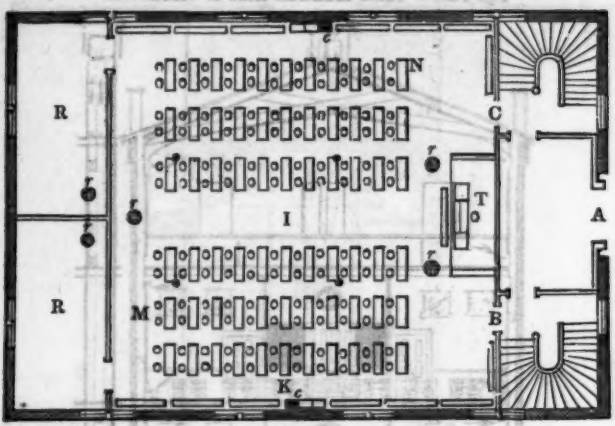
Fig. 2—Ground Plan, Yard, Basement, &c.



A—Front yard.
B—Girls' yard.
C—Boys' yard.
D—Door.
E—Boys' entrance rooms.
G—Girls' entrance rooms.
F—Furnace.
S—Stairs.
W—Windows.
P—Privies, with screen, doors, &c.
X—Gates.

a—Cold air ducts.
b—Warm air ducts.
c—Foul air ducts or ventilating flues.
d—Smoke pipe.
e—Pump, sink.
f—Umbrella stand.
g—Hollowed plank to receive wet boots, overshoes, &c.
o—Bins for hard coal, charcoal, &c.
j—Close board fence.

Fig. 3—Plan of First Floor.



A—Front entrance.
B—Girls' entrance.
C—Boys' entrance.
I—Centre aisle, eight feet.
L—Aisle between each range of seats and desks, two feet four inches.
K—Side aisle, four feet four inches.
M—Space five feet wide.
T—Teachers' platform and desk.
R—Recitation rooms, each twenty-three feet by twelve, furnished with twenty chairs, seven inches from the wall and thirteen inches apart.
Q—Library and apparatus, from eleven feet by fourteen feet.
N—Kimball's desk and two chairs.
O—Piano.
r—Hot air registers.
c—Ventilating flue or foul air duct. N—Settees.

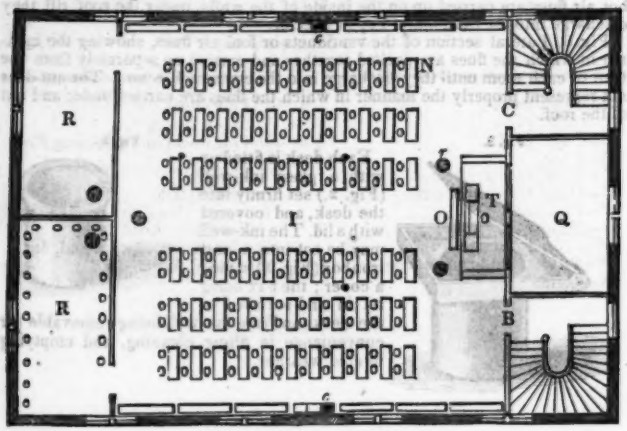


Fig. 4—Plan of Second Floor.

Figs. 5 and 6. Plans exhibiting Mode of Ventilation.

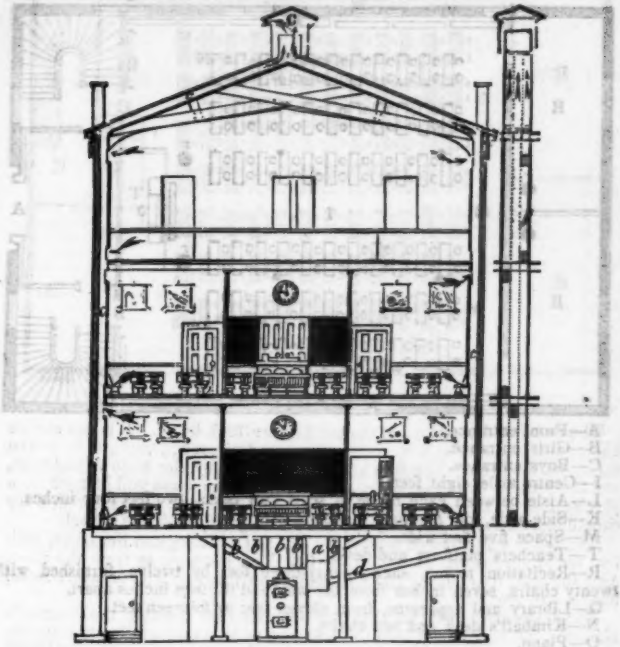
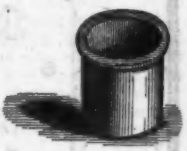


Fig. 5. Transverse section exhibiting the manner in which the ventiducts or hot air flues are carried up on the inside of the walls, under the roof, till they discharge into the Stationary Top or Ejector.

Fig. 6. Lateral section of the ventiducts or foul air flues, showing the manner in which the flues are packed together and carried up separately from the floor of each room until they discharge into the common Ejector. The cut does not represent properly the manner in which the flues are carried under and out of the roof.

Fig. 3.

Fig. 2.



Each desk is fitted up with a glass ink-well (Fig. 2,) set firmly into the desk, and covered with a lid. The ink-well may be set into a cast iron box (Fig. 3,) having a cover; the box being let in and screwed to the desk, and the ink-well being removable for convenience in filling, cleaning, and emptying in cold weather.

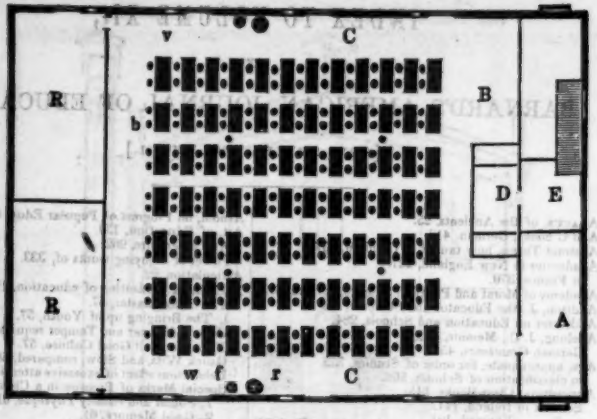


Fig. 3. Male Department.

The exterior dimensions of the building are 72 ft. by 54. It is two stories high, with a basement 9 ft. in the clear, and an arched attic, 6 ft. to the spring of the arch. The first story is occupied by the male department, and the second by the girls' department. The basement will be used as a play ground for the boys in wet weather, and the attic is appropriated for calisthenic exercises for the girls, and meetings of the whole school.

The lower school-room is 50 ft. by 47, and 12 ft. high in the clear, with two recitation rooms, each 25 ft. by 12. The entrance is from the East, near the end, into a lobby (A) 8 ft. wide, and fitted up with scraper, mats, hooks, &c. &c.

The desks are so placed, that the scholars face towards the teacher's platform, (D) which is against the northern partition, separating the school-room from the entry. The desks are placed in seven ranges, containing each 12 desks, each desk accommodating two scholars, and the front of one desk constituting the back of the preceding one. The seats and desks are painted green. Each range is separated from the other by an aisle 18 inches wide, and the whole body of desks is surrounded on three sides by an open space (C C) 6 feet wide.

On each side of the teacher's platform (D) there is a platform with an open space (B) in front, of 10 ft., of half the elevation, for two assistants In the rear of the platform is a room (E) appropriated to the teacher.

The recitation rooms are separated from the school-room by a glass partition. Two sides of each is occupied by blackboards.

The school-rooms and recitation rooms are ventilated by openings at the top and bottom, into eight flues carried up in the wall into the space between the arch of the attic and the roof. This space communicates at all times with the open air by a grating at either end, (as indicated in Fig. 1 and 2.)

The school-room is heated by two furnaces in the basement, the hot air ascending through the openings (r r) into the lower room, and carried into the second story and attic, by conductors (f f.)

There are six large windows to the school-room, and one to each recitation room. The windows are protected by venetian blinds, which are never opened. The amount of light is graduated by opening or closing the slats.

The girls' school-room is on the second floor, and is, in every respect like the one below. Both rooms are well supplied with blackboards, and with a set of Mitchell's series of Outline Maps, and globes.

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ASCHAM, BACON, WOTTON, MILTON, LOCKE, AND SPENCER, ON EDUCATION. Edited by HENRY BARNARD, LL. D. 1862. Price, $1.50. 400 pages 8vo.

ENGLISH PEDAGOGY: or Education, the School, and the Teacher in English Literature—in a Series of Papers prepared for "*The American Journal of Education.*" Edited by HENRY BARNARD, LL. D. Philadelphia: J. B. Lippincott & Co. 1862. Price, $2.00. Parts I., II., III., IV. 592 pages 8vo.

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